

Climate Action Plan Implementation Update

City of Bloomington

Economic and Sustainable Development Department

Shawn Miya, Assistant Director of Sustainability

June 2024



ESD Sustainability Team

Shawn Miya, MPH

Assistant Director of Sustainability

Hired April 2023

McKaylyn Lynch

Sustainability Programs Coordinator

Hired July 2022

Anurag Bhat

McKinney Climate Fellow

Began May 20, 2024

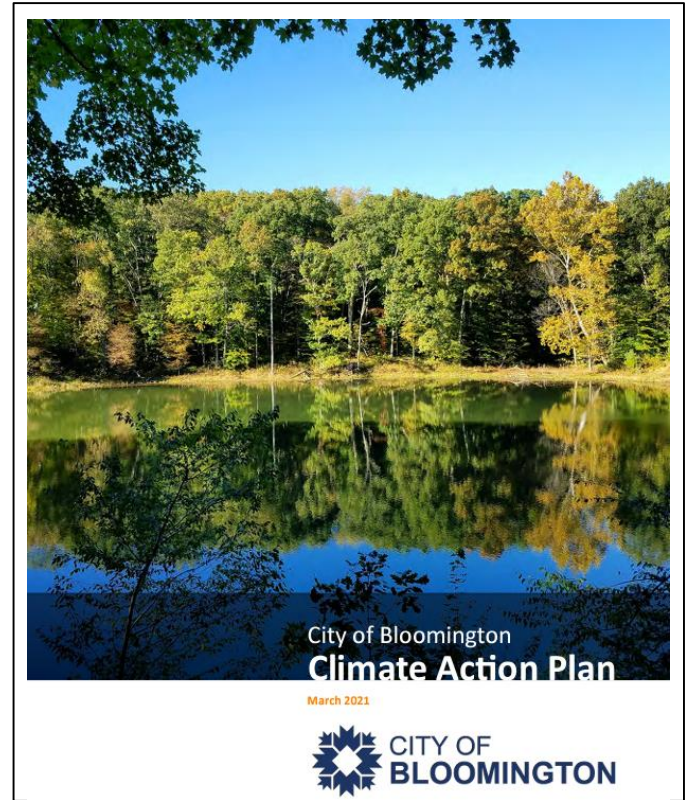


2021 Climate Action Plan

Goals are to reduce Bloomington community greenhouse gas emissions 25% below 2018 emission levels by 2030 and **achieve carbon neutrality by 2050**

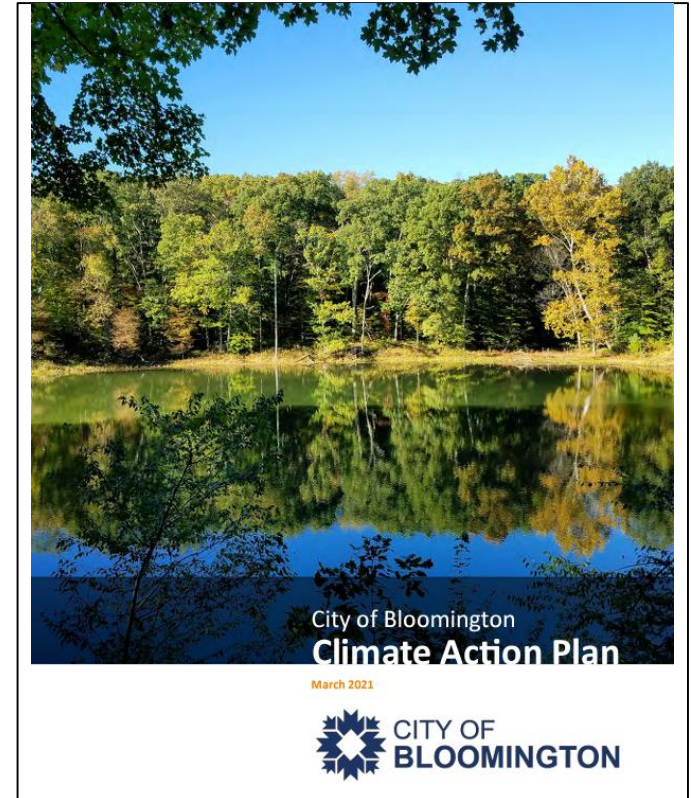
2018 - 2022 Greenhouse Gas Inventory

- ★ Completed in August 2023
- ★ Gnarly Tree Sustainability Institute \$15,000



Climate Action Plan Dashboard

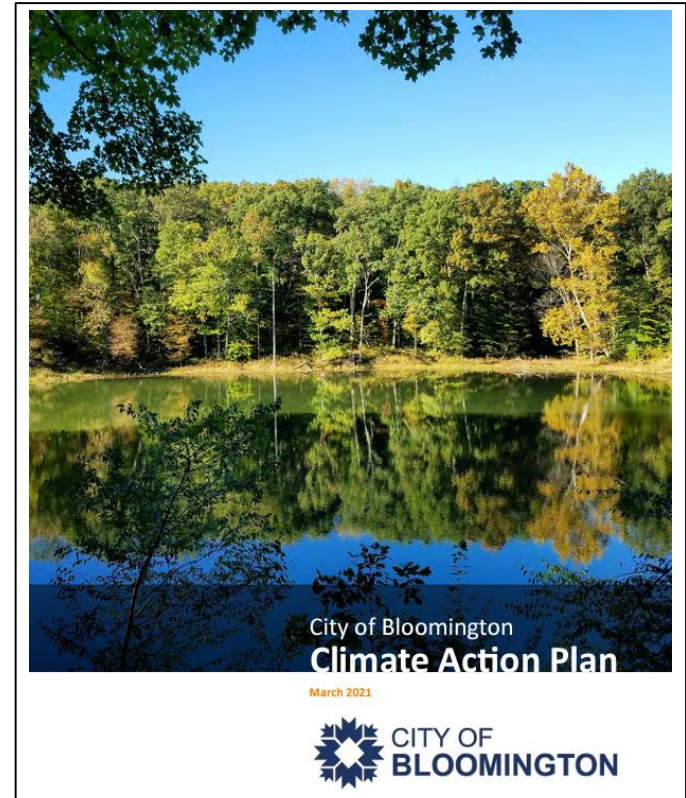
- ★ Launched April 2024
- ★ ClimateNav \$60,000/year
 - Constituent Dashboard
 - Staff Dashboard
 - Annual GHG Inventories (Municipal + Community-Wide)
 - Quantified GHG Emissions Reports (10/year)
 - Regulatory/Disclosure Reporting (CDP)
 - 20 hours of white-glove product support



2021 Climate Action Plan

Climate action goals are divided into 8 Sectors:

- Transportation & Land Use
- Energy & Built Environment
- Waste Management
- Water & Wastewater
- Local Food & Agriculture
- Health and Safety
- Greenspace and Ecosystem
- Climate Economy



Transportation & Land Use

Goal TL 2: Support and encourage electric vehicle (EV) adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030.

- ★ (2) Level 2 EV charging stations installed at Switchyard Park (free charger was moved to the Switchyard Park Maintenance Facility): \$20,139
- ★ Bloomington's first Level 3/DC Fast EV charger might be installed in 2024
- ★ Regional Opportunities Initiative EV Charging Task Force
 - Hired Loughmiller Group to conduct Uplands study

Transportation & Land Use

Goal TL 1: Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.

Strategy TL 1-B: Increase bicycle/pedestrian commuting from 17% to 18% by creating infrastructure to better encourage alternatives to vehicles.

E-Bike Voucher Program

- ★ \$15,000 contract with BikeSmiths
- ★ \$15,000 contract with Revolution Bike & Bean
- ★ 12 E-Bikes sold to date
- ★ 11 Gen. population vouchers x \$500 ea. = \$5,500
- ★ 1 Low income vouchers x \$1,000 ea. = \$1,000
- ★ Total paid \$6,500

Transportation & Land Use

Action: TL2-A- 2 Conduct a municipal fleet inventory and EV Implementation plan.

Effort to identify opportunities for electrifying, right-sizing, and improving overall efficiency of vehicles to meet CAP Goals. Include implementation recommendations to incorporate EV's through right-timing purchases with a planned vehicle-replacement schedule.

- ★ 2023 Duke Energy Fleet Electrification Assessment
- ★ 2023 purchased 3 Chevy Bolt EV & 2 Chevy Bolt EUV Sedans for Public Works \$138,968.00

Transportation & Land Use

Action: TL1-I- 1 Introduce a policy to replace City off-road and lawn equipment with electric and low carbon fuel alternative options at the time of replacement with traditional internal combustion engine (ICE) as optional requiring proof of need.

Parks and Recreation Equipment Electrification

- ★ 2023 Purchased \$104,239.53 worth of electric equipment:
 - Lawn mowers
 - Leaf blowers
 - String Trimmers
 - UTVs

- ★ 2024 \$100,000 Allocated

Energy & the Built Environment

Goal EB 1: Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.

2023 **Solar**, Energy Efficiency and Lighting Program

- ★ Installed 8 kWh solar systems on 10 nonprofits and 10 small businesses: \$500,000

2024 **Solar**, Energy Efficiency and Lighting Program

- ★ Total allocated \$425,000
 - 2023 Encumbered \$125,000
 - 2024 CRED \$300,000
- ★ Goal is to install 17 solar systems by end of year
- ★ 7 accepted applications: 3 small businesses & 4 nonprofits
- ★ Seeking 10 more applicants

Energy & the Built Environment

Goal EB 1: Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.

2023 Low Income Solar Grants

- ★ 2023 BHA Walnut Woods grant to install 102.96 kWh worth of solar arrays: \$100,000 (additional funding provided by BHA)
- ★ 2023 Habitat for Humanity grant to install 8 kWh solar arrays on 10 houses: \$250,000

2024 Low Income Solar Grants

- ★ 2024 BHA Cresmont grant to install a total of 41.31 kWh worth of solar arrays: \$100,000
- ★ 2024 potential grant to install 8 kWh solar arrays on houses at Summit Hill Community Land Trust: \$100,000

Energy & the Built Environment

Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.

Solar, Energy Efficiency, and Lighting Program

- ★ Nonprofits and small businesses can receive a free energy audit and \$10,000 grant for energy efficiency projects or lighting upgrades
- ★ 2022 IFF hired for SEEL energy efficiency audits: \$50,000
- ★ 2023 Paid IFF: \$14,042.30
- ★ Contract expired December 2023 - contract addendum pending approval

2023: \$250,000 Allocated

- ★ Completed 4 energy efficiency audits
- ★ Completed 4 Projects = \$40,000

2024: \$185,000 Allocated

- ★ 1 project completed & pending grant approval = \$10,000
- ★ 2 applications received

Energy & the Built Environment

Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.

Municipal Energy Efficiency & Decarbonization Services

- ★ 2023 issued RFP and encumbered \$215,000 for service contract with Donovan Energy

- ★ 5 Phase contract:
 1. Data Organization - organize and upload Duke Energy, Centerpoint, and water bills and building square footage to an online energy monitoring dashboard called Brightly (ESD pays subscription fee \$12,936/year)
 2. Desktop Audit - assess and stack rank city-owned real estate assets. This ranking will focus on identifying those assets that present the most significant opportunities for energy efficiency and decarbonization.

Energy & the Built Environment

Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.

Municipal Energy Efficiency & Decarbonization Services

3. Building Audits - Conduct in-depth energy audits of prioritized city assets.
4. Energy Conservation Measure (ECM) Evaluation and Design - Evaluate and select ECMs for implementation utilizing the results of the energy audits. Engineer designs for the selected ECMs for each project complete with detailed financial and operational impact analysis.
5. Successful implementation of ECMs, leading to improved energy efficiency and reduced operational costs.

Energy & the Built Environment

Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.

Municipal Energy Efficiency & Decarbonization Services

Energy Efficiency and Conservation Block Grant

- ★ \$141,000 voucher awarded
- ★ Submitted City Hall LED lighting retrofit project proposal 5/1/2024
- ★ Plan to complete project by end of 2024

Empowering Energy Partnerships in Indiana Communities (EPIC) Grant

- ★ Submitted Letter of Intent 4/30/24
- ★ Energy efficiency and decarbonization projects at the Buskirk Chumley Theater worth \$500,000
- ★ 20% match requirement = \$100,000

Energy & the Built Environment

Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.

Hopewell

- ★ Issued RFP in 2023
- ★ Hired The Green Engineer \$148,180 (TIF)
- ★ Achieve LEED for Neighborhood Development
- ★ Ensures Hopewell is developed in accordance with sustainable practices

Energy & the Built Environment

Goal EB 5: Increase financing options for Energy Efficiency and Renewable Energy projects citywide.

2023 Bloomington Green Home Improvement Program

- ★ \$75,000 allocated
- ★ Financing available at a 0.5% interest rate at Clean Energy Credit Union and Hoosier Hills Credit Union
- ★ \$1,000 rebate if loan obtained to complete energy efficiency project, solar installation, or purchase high efficiency appliances
- ★ 5 rebates x \$1,000 = \$5,000

Energy & the Built Environment

Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.

2024 Bloomington Green Home Improvement Program (Revised)

- ★ \$75,000 allocated
- ★ No loan requirement, but still available
- ★ Increased City rebate amounts especially for low-income residents
- ★ (Optional) Duke Smart Saver Program - Duke rebates are available if project is completed with Duke pre-approved contractors
- ★ IRA Tax Credits

Energy & the Built Environment

Strategy EB 1-A:

Increase solar on City facilities 20% by 2030.

32 Municipal Solar Installations

- ★ 2023 hired Veregy for solar Operation & Maintenance (O & M) for 3 years
- ★ 2023: \$75,000 Allocated
Paid \$36,800 for O & M
- ★ 2024: \$70,000 Allocated
Paid \$33,278.28 for Time and Materials for inverter, solar panel, and electrical panel repairs to date
Paid \$9,200 for O & M to date
- ★ AlsoEnergy solar production monitoring dashboard \$15,402/year
- ★ ESG Year 1 Performance Guarantee Savings Report

Energy & the Built Environment

Strategy EB 1-A:
Increase solar on City facilities 20% by 2030.

2024 Switchyard Maintenance Building & Cascades Golf Clubhouse Solar Installations

★ 2023 Encumbered: \$60,000



Cascades Golf Clubhouse

Waste Management

Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).

Goal WM 2 Educate, motivate, and empower the public to achieve waste reduction and diversion.

Multifamily Composting Project

- ★ Co-funded project with Monroe County Solid Waste District
- ★ \$27,500 grant provided to 1 Sustainable Joe
- ★ Educate residents about composting and begin composting onsite

Organic Waste Task Force

- ★ Seeking funds for composting processing facility and staff

2024 Bloomington Commission on Sustainability (BCOS) Sustainable Neighborhoods Grant Program

- ★ \$10,000 allocated
- ★ Provided GardenQuest with \$1,000 grant for pilot residential TerraCycle project

Water and Wastewater

Goal W 2 Maintain
source and drinking water
quality through climate
related challenges

Goal W 4 Mitigate flood
hazards and impacts.

2023 & 2024 Lake Monroe Water Fund Grants

- ★ Provided \$25,000/year to support water quality protection projects

2024 BCOS Sustainable Neighborhoods Grant Program

- ★ \$10,000 Allocated
- ★ \$1,000 grants available for rain gardens

Local Food and Agriculture

Goal FA 1 Increase food and nutrition security citywide.

Goal FA 2 Increase local agricultural resilience to climate shocks.

Goal FA 3 Increase and stabilize local food market.

2023 & 2024 Hoosier Hills Food Bank Grant

- ★ \$10,000/year to purchase locally grown food and distribute to low income families

2023 & 2024 (Pending) Mother Hubbard's Cupboard Grant

- ★ \$10,000/year to support gardening program

2024 BCOS Sustainable Neighborhoods Grant Program

- ★ \$10,000 Allocated
- ★ \$1,000 grants available for gardening supplies

2024 Urban Gardening Implementation Team

- ★ Increase urban gardening throughout City

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Goal HS 3 Respond to climate risks and impacts.

Climate Resilience Plan

- ★ 2023 IU Environmental Resilience Institute Climate Resilience Cohort
- ★ 2023 Hosted 2 Community Climate Resilience Workshops
- ★ Prioritized climate risks and vulnerabilities and the adaptation strategies to address them
- ★ [Climate Resilience Map](#) - ITS & ESD
- ★ 2024 Publish Draft Climate Resilience Plan

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Goal HS 3 Respond to climate risks and impacts.

2024 NOAA HeatWatch Campaign

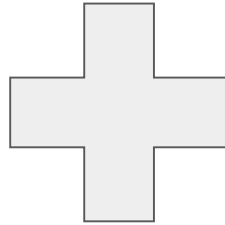
- ★ \$15,000 Allocated
- ★ Citizen science project
- ★ Collect temperature data to map urban heat island
- ★ One hot day between July 26 - August 8
- ★ Working with local meteorologist to determine best day
- ★ Understand and address heat distribution across city
- ★ Collect particulate matter (PM 2.5) data collection in collaboration with the Bloomington Environmental Commission

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Goal HS 3 Respond to climate risks and impacts.



Greenspace and Ecosystem

Goal G 1 Increase quantity and quality of greenspace within the community.

Goal G 2 Increase quantity and quality of climate adaptive native habitats.

Goal G 3 Increase citywide tree canopy coverage by 3% of 2018 values.

Goal G 4 Reduce stormwater and micro heat island impacts.

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Goal HS 3 Respond to climate risks and impacts.

Climate Adaptation Strategy Implementation

2024 Cool Corridors

- ★ Increase shade to prevent heat related illnesses
- ★ Target low income areas
- ★ \$50,000 for tree plantings
- ★ \$27,500 to shelter bus stops
- ★ Working with BT & Holly Warren to include art in new bus shelter designs

Tree Tinders Program

- ★ 2023: \$14,500 grant for CanopyBloomington
- ★ 2024: \$25,000 allocated

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Goal HS 3 Respond to climate risks and impacts.

Climate Adaptation Strategy Implementation

2024 AC Distribution Program

- ★ \$50,000 Allocated
- ★ Provide free AC window units to low income residents with a medical condition that increases risks of heat related illnesses
- ★ Issued RFP 5/10/24 to hire AC installation company
- ★ Townships will accept and process applications
- ★ ESD to coordinate with applicant and AC installation company

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Goal HS 3 Respond to climate risks and impacts.

2024 Beat the Heat Campaign

- ★ IU School of Informatics: \$15,900 service contract
- ★ Hosted 2 Workshops to understand vulnerable populations in Bloomington, map assets, and complete mock heat wave scenario
- ★ Beat the Heat Implementation Team: Monroe Co. Health Dept., Monroe County Emergency Management, NGOs, MCCSC, BT, Duke Energy
- ★ Heat Action Plan - specific actions for city/county/NGOs to take before and during summer months and during a heat wave

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Climate Adaptation Strategy Implementation

2024 AC Distribution Program

- ★ \$50,000 Allocated
- ★ Provide free AC window units to low income residents with a medical condition that increases risks of heat related illnesses
- ★ issued RFP 5/10/24 to hire AC installation company.
- ★ Townships will accept and process applications
- ★ ESD to coordinate with applicant and AC installation company

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

Goal HS 2 Prepare Bloomington for climate risks and impacts.

Climate Adaptation Strategy Implementation

Weatherization

- ★ \$50,000 Allocated
- ★ Provide funding for low income residents to weatherize their homes in order to lower utility costs, increase energy efficiency and maintain healthy interior temperatures
- ★ Initial discussions to provide grant to SCCAP to implement projects

Free Access to Swimming Pools

- ★ Working with Parks and Rec to begin program again

Health & Safety

Goal HS 1 Educate, engage, and empower the public for climate health and safety.

2024 Climate Talks

- ★ Collaboration with Parks and Rec
- ★ Monthly presentations to educate residents about climate change, how to reduce GHG emissions, and increase climate resilience
- ★ Climate Change & Health
- ★ IRA Tax Incentives
- ★ Going Green with Battery Powered Lawn Equipment
- ★ Climate Resilient Tree Species and Tree Maintenance
- ★ Climate Resilient Gardening

Climate Economy

Goal CE 1 Build marketplace climate resilience.

Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals.

Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.

2024 Green Workforce Development

- ★ \$55,000 Allocated
- ★ Project in development

Climate Economy

Project 46

Regional climate
alliance between
Bloomington,
Nashville, and
Columbus

Funding: each city provides \$0.50/capita

- ★ Bloomington 2023: \$40,000
- ★ Bloomington 2024: \$40,000

September 2023

- ★ Steering Committee formed
- ★ Quarterly meetings begin

December 2023

- ★ Signed Memorandum of Understanding
- ★ Signed funding agreement with fiscal sponsor:
Heritage Fund of Bartholomew County

Climate Economy

Project 46

Regional climate alliance between Bloomington, Nashville, and Columbus

December 2023

- ★ Signed Memorandum of Understanding
- ★ Signed funding agreement with fiscal sponsor: Heritage Fund

March 2024

- ★ Received \$27,360 donation from Cummins. Inc.
- ★ Hired Farallon Strategies for 18 months: \$134,000
- ★ Formalize Project 46
- ★ Interim/long term governance documents
- ★ Regional greenhouse gas inventory

Climate Economy

Project 46

Regional climate
alliance between
Bloomington,
Nashville, and
Columbus

February 2024:

EPA Climate Pollution Reduction Grant

Submitted 11 project ideas worth \$72M for Project 46

- ★ Municipal Solar Array Program
- ★ Municipal Weatherization and Decarbonization Program
- ★ Community Micromobility Hub Program
- ★ Solar Array and Battery Grant Program
- ★ Pre-weatherization and Weatherization Grant Program
- ★ Commercial and Industrial Equipment Grant Program
- ★ Fleet Electrification Grant Program
- ★ Public EV Charging Grant Program
- ★ Lawn Care Equipment Grant Program
- ★ Municipal Fleet Electrification Program
- ★ Municipal EV Charging Installation Program

6 Projects Selected worth \$38M

July 2024: EPA will announce awards

THANK YOU.

Questions?

