Introduction to Bloomington's Climate Action Plan DRAFT 11-12-2020

Bloomington's Climate Strategy

Addressing a Complex Challenge

October 2019

- How is Bloomington contributing to climate change and in what ways?
- Report: 2018 Greenhouse Gas Emissions Inventory

January 2020

- What are the emission trends and is Bloomington reducing emissions to meet goals?

March 2020

- How does the public perceive climate change and the City's role in addressing it?

June- August 2020

- What would be the most effective strategies and actions to reduce Bloomington's emissions?

September 2020

- Report: 2020 Climate Vulnerability Assessment
- What can Bloomington expect in the future for climate effects?

October-December 2020

- Do stakeholders agree with and support the identified high impact strategies
- DRAFT Climate Action Plan

Early 2021

- Passage by Council with yearly updates
- Continued implementation and progress tracking

CITY OF BLOOMINGTON
ECONOMIC AND SUSTAINABLE DEVELOPMENT

Why a Climate Action Plan?

Bloomington's response to climate change requires a concerted effort to **decrease use of fossil fuels and adapt to climate impacts**.

This is a roadmap that identifies high impact actions that will move Bloomington towards carbon neutrality (no pollution) by 2050, an aspiration of the Sustainability Action Plan.

Who was involved in identifying the draft strategies to reduce emissions?

The focus groups with the planning team were held over three months this summer about the focus areas of the plan by reviewing actions implemented in other cities-

Climate Mitigation

- Transportation and Land Use
- Energy and the Built Environment
- Waste Management
- Water and Wastewater

Climate Adaptation

- Local Food and Agriculture
- Health & Safety
- Greenspace and Ecosystem Health
- Climate Economy

Other focus groups were also held by community members about priorities of the plan.

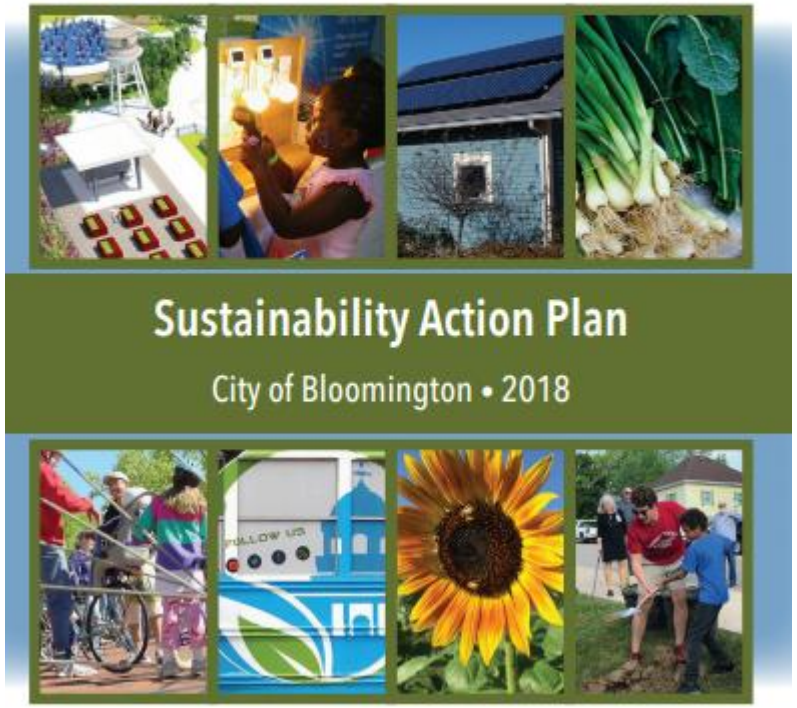
Climate Action Plan vs. Sustainability Action Plan

How do the two plans relate to each other?

The Bloomington Climate Vulnerability Assessment was goal 1.2.a. of the Sustainability Action Plan and was completed this spring.

The Sustainability Action Plan also pledges that the City will "complete community GHG inventories and engage citizens in climate action."

To effectively engage citizens in climate action requires knowledge of **how Bloomington's emissions are produced and a metrics-based strategy** to move the community towards a 40% reduction by 2040 and achieving carbon neutrality by 2050.



CAP Plan Anatomy

Goals (see right): the climate commitments that the community is making to achieve the reduction goal.

Strategies: a general plan to achieve the goal or “how we’ll get there”

Actions: the specific activity that is recommended to achieve the strategy

Metrics: indicators of progress in a given category

Benefits: categories of expected positive outcomes that could occur if implemented

Executive Summary

Our Climate Action Goals:

Transportation and Land Use

Goal T1 - Decrease vehicle miles traveled (VMT) by 8% by 2030.

Goal TL2 - Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030.

Energy And Built Environment

Goal EB 1 - Increase distributed renewable energy to 18% of citywide consumption by 2030

Goal EB 2 - Increase energy efficiency citywide 16% for electricity and 2% for natural gas by 2030

Goal EB 3 - Support decarbonization of the local electricity grid

Waste Management

Goal WM 1 - Increase landfill solid waste diversion by 30% by 2030 (26,500 ton reduction).

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

Water and Wastewater

Goal W1 - Promote increased water conservation citywide.

Goal W2- Maintain source and drinking water quality through climate related challenges.

Goal W3 - Reduce energy use associated with treating and transporting water and wastewater by 10% by 2030.

Goal W4 - Mitigate flood hazards and impacts.

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..

Health and Safety

Goal HS1 - Educate, engage, and empower the public for climate health and safety.

Goal HS2 - Respond to climate risks and impacts.

Goal HS3 - Prepare Bloomington for climate risks and impacts.

Greenspace and Ecosystem Health

Goal G1 - Increase quantity and quality of greenspace within the community.

Goal G2 - Increase quantity and quality of climate adaptive native habitats.

Goal G3 - Increase citywide tree canopy coverage by 3% by 2030.

Goal G4 - Reduce stormwater and micro heat island impacts.

Climate Economy

Goal CE1 - Build marketplace climate resilience.

Goal CE2 - Attract, create, and support businesses that are committed to sustainability and climate goal.

Goal CE3 - Develop new mechanisms for financing City climate action plan implementation.

Transportation and Land Use

Goal T1 Decrease vehicle miles traveled (VMT) by 8% by 2030

How We'll Get There

Strategy TL1-C:

Increasing transit utilization by 5% through infrastructure and frequency investments.

How We'll Measure Progress

Reported public transit commuter transportation data—US Census, Annual VMT data reported

Bloomington Transit is the main local transit service in the City and operates 14 routes with a fleet of 49 buses (Transportation Plan, 2019). The Bloomington Transit Route Optimization Study indicated that increasing frequency, adding weekend service, and expanding service to the west side, to employment centers, housing complexes, and to Ivy Tech are top priorities for transit users. While existing services adequately meet rider's needs, some riders expressed dissatisfaction with service provision especially that the transit schedules did not align with or satisfy travel needs. Given the current street network, improvements to bicycle, pedestrian, bus, and other supported modes of non-automobile travel along the major N-S and E-W corridors through the center of Bloomington were identified in the Transportation Plan as high-priority for investment

Initial Actions

TL1-C- 1	Implement recommendations of the Bloomington Route Optimization Study
TL1-C- 2	Collaborate with Bloomington Transit to establish a Guaranteed Ride Home program as free reimbursement program for registered commuters

Strategy Expected Benefits

Reduced Costs

Enhanced Transit System

Reduced Traffic Congestion

Reduced GHG Emissions

Planned Energy and Built Environment GHG Emission Reductions

Planned Sector Emission Reductions Through 2030

The strategies and actions included in this section of the Climate Action Plan are projected to reduce the city's annual GHG emissions by 186,891 metric tons (MT) by 2030 - a 19.4% reduction over 2018 levels.

This is equivalent to eliminating **3,667 million** cubic feet of man-made greenhouse gas atmosphere annually by 2030.

Individual Strategy Annual Emission Reductions by 2030

Strategy EB 1-A:
Increase solar on City facilities

Strategy EB 1-B:
accelerate on-site solar PV citywide

Strategy EB 1-C:
Improve energy policy.

Strategy EB 2-A:
Increase City building energy efficiency

Strategy EB 2-B:
Accelerate energy efficiency citywide.

Strategy EB 2-C:
Increase net zero building stock citywide

Strategy EB 3-A:
Support Duke Energy's grid emissions goal

Strategy EB 3-B:
Advocate for stronger state policy.

Strategy EB 4-A:
Accelerate electrification of systems

Strategy EB 4-B:
Accelerate low/no carbon alternatives

Strategy EB 5-A:
Promote Equity in Energy

Interpretation:

Strategy EB 1-B: on-site solar PV citywide and Strategy EB 2-B accelerating energy efficiency will be the two most effective strategies to reaching the energy and built environment goal.

Energy & Built Environment- 19.4% reduction by 2030

- Accelerate solar installations on-site
- Accelerate energy efficiency efforts
- Electrify fossil fuel (ex: natural gas)

Transportation & Land Use- 14.2% reduction by 2030

- Encourage electric vehicle adoption
- Reduce single occupancy vehicle use by 7%
- Reduce commercial & industrial vehicle use by 5%

Waste Management- 13.6% reduction by 2030

- Increase recycling by 30%
- Increase organics diversion by 30%
- Divert recoverable materials by 30%

Water & Wastewater Treatment- 7.4% reduction by 2030

- Increase water conservation
- Reduce energy use for treating and transporting water

Health & Safety

- Increase resilience to heat and flooding
- Prepare for hazard impacts
- Improve community health

Climate Economy

- Increase workforce development
- Increase green business financing
- Improve business resilience to risk

Local Food & Agriculture

- Increase local commercial & noncommercial food cultivation
- Reduce food insecurity
- Reduce food waste

Greenspace & Ecosystem Health

- Increase tree canopy coverage by 3%
- Expand green infrastructure
- Reduce heat island effects

Discussion & Feedback

https://bloomington.in.gov/sustainability/2020-climate-action-plan

Complete the Feedback Form!

Further discussion at Council meeting on 11-17, as well. Can also submit comments via email to sustain@bloomington.in.gov


Questions?