City of Evansville
INDIANA

Image credit: TYMEALLO Studios

EVANSVILLE

CLIMATE ACTION PLAN

2025

Image credit: Alex Morgan Imaging

Acknowledgments

The 2025 Climate Action Plan was developed by the Evansville Climate Collaborative, City of Evansville, under the guidance of KERAMIDA Inc. This plan would not have been possible without input from the Evansville Community. The City of Evansville would like to thank all of those who supported and contributed to this initiative.

Project Leads

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Office of the Mayor

Stephanie Terry	Mayor
Lindsay Snyder	Deputy Mayor

City Council

Ben Trockman	Ward 1
Missy Mosby	Ward 2
Zac Heronemus	Ward 3
Tanisha Carothers	Ward 4
Angela Koehler Lindsey	Ward 5
Jim Brinkmeyer	Ward 6
Mary Allen	At-Large
Paul Green	At-Large
Courtney Johnson	At-Large

Evansville Climate Collaborative Board

Roger Cohen	Weaver Consultants Group
Stacy Milheiser	Lochmueller Group
Rob Flores	Berry Global
Andrew Clark	CRS OneSource
Shannon Begeman	City of Evansville

is for everyone.
evansville region

A diverse advisory team of local and regional stakeholders and content specialists was assembled to provide input and oversight to develop this plan.

Consultant Team

KERAMIDA

CAP 2021 Stakeholders

We would like to recognize all the stakeholders who provided input for the original Evansville Climate Action Plan (2021). They were the pioneers that forged the path forward.

Evansville Climate Action Plan 2021

This CAP was funded through the U.S. Department of Energy (DOE) Energy Efficiency and Conservation Block Grant (EECBG).

Stakeholder Task Force

Joe Atkinson	Mayor's Office, City of Evansville
Mary Allen	City Council At-Large
Paul Green	City Council At-Large
Roger Cohen	Weaver Consultants Group
Vic Kelson	Evansville Water and Sewer Utility
Paul Bouseman	Evansville Parks & Recreation
Diane Clements-Boyd	Evansville-Vanderburgh County Human Relations Commission
Tyler Stock	Evansville Regional Economic Partnership
Johnny McAlister	City of Evansville, Building Commissioner's Office
Lana Abel	Evansville Department of Metropolitan Development
Chris Norrick	Solar United Neighbors
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Jenna Richardt	Centerpoint Energy
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Jonathan Siebeking	Metropolitan Evansville Transit System
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Lorie VanHook	Evansville Trails Coalition
Shawn Dickerson	City of Evansville, Urban Forestry
James Mosley	EnviroKinetics
Susie Sirnic	Tri-State Creation Care
Joe Gries	Vanderburgh County Health Department

Mayor's Message

Climate change is a global concern, but cities around the world are bracing for local impacts and advocating for solutions to the problem. Evansville is no exception.

Evansville is already experiencing local climate impacts, including more frequent and intense storms, extreme heat and drought, and even wildfire smoke from neighboring lands. These impacts have serious consequences for everyone - our neighbors, our families, and ourselves. They may cause social and economic hardships such as storm damage, higher food prices, and poor air quality, and they most affect those without the means to prepare, cope, and recover.

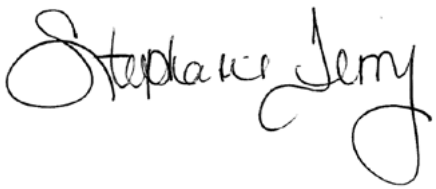
Now more than ever, it is time for Evansville to take action to prepare for climate impacts and do our part to curb climate change. We need to lead the way forward to proactively address the challenges we face together.

In that spirit, I am delighted to introduce Evansville's **2025 Climate Action Plan**. This strategic plan provides a roadmap to a more sustainable, healthy, and resilient City. It recommends 50 actions that we can take to reduce our greenhouse gas emissions, improve our air quality, and prepare us for climate impacts. Through these actions, we can make our buildings more efficient, our vehicles cleaner, our waste repurposed, our urban space greener, and our City more resilient.

This plan is ambitious. We've set enthusiastic short-term and long-term goals, and we can achieve them if we all work together. Community members and stakeholders will be vital to the success of this plan, just as they were to its development.

I am proud to present this plan and encourage everyone to contribute to the goals ahead. Evansville is leading the way forward; moving forward *together* is the best way to ensure our community has a safe, healthy, and prosperous future.

Mayor Stephanie Terry



"Evansville is already experiencing local climate impacts, including more frequent and intense storms, extreme heat and drought, and even wildfire smoke from neighboring lands."

Image credit: TYMEALLO Studios

Contents

List of Acronyms

AFOLU	Agriculture, Forestry and Other Land Use
CAP	Climate Action Plan
CH_4	Methane
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DOE	Department of Energy
EECBG	Energy Efficiency and Conservation Block Grant
ECC	Evansville Climate Collaborative
EV	Electric Vehicle
GHG	Greenhouse Gas
IDEM	Indiana Department of Environmental Management
METS	Metropolitan Evansville Transit System
MT	Metric Tonne

Image credit: Joe Atkinson

EXECUTIVE SUMMARY

The climate crisis has become a global concern, and cities all over the world are bracing for climate change impacts.

The City of Evansville developed this 2025 Climate Action Plan (CAP) to prepare our community for local impacts. The CAP will serve as a roadmap with actionable strategies the City and its residents can take to ensure a safe, healthy, and resilient community. This plan is a culmination of many months of intense, thoughtful work. The Evansville Climate Collaborative (ECC) led the project and engaged sustainability consultant KERAMIDA Inc. (KERAMIDA) to develop the plan. ECC assembled a project team to include over 30 community stakeholders to provide input and guidance for the process.

The project team utilized the original Evansville CAP (2021) as a foundation for this work. Every attempt was made to honor the input of the community and the intent of the strategies in the original plan. In addition, many local technical studies and strategic plans were analyzed to gather data and insight to inform the new plan. The team crafted new strategies and streamlined existing strategies to be more actionable, measurable, and relevant for the City of Evansville.

The result is Evansville's new 2025 CAP. **The plan presents 50 priority actions across 5 sectors** that are aimed at reducing greenhouse gas (GHG) emissions, improving air quality, reducing energy use, and improving the community's resilience to climate impacts. It is a strategic plan with achievable actions over the next five years (2025-2030) that will contribute to longer-term goals through 2050 and beyond.

	ENERGY	TRANSPORTATION	WASTE	LAND	RESILIENCY
STRATEGY 1	Increase Energy Efficiency	Reduce Vehicle Miles Traveled	Increase Recycling & Composting	Integrate Green Infrastructure & Agriculture	Improve Resilience to Extreme Weather
STRATEGY 2	Transition to Renewable Energy	Transition to Low Emission Vehicles	Prevent Waste at Source	Encourage Clean & Sustainable Land Management	Increase Awareness & Equity

These strategies were selected to achieve an overall goal to reduce GHG emissions by **30% by 2030** and **80% by 2050**.

Based on the 2023 GHG Inventory, the City of Evansville emitted over **2.7M metric tonnes (MT) of carbon dioxide equivalent (CO_2e)**. These emissions are spread across three sectors: Energy 78.6%, Transportation 15.0%, and Solid Waste 6.4%.

With CenterPoint's anticipated renewable grid mix, Evansville's emissions will automatically decline. However, the City of Evansville can take strategic action to further decrease these emissions as shown in the graph below.

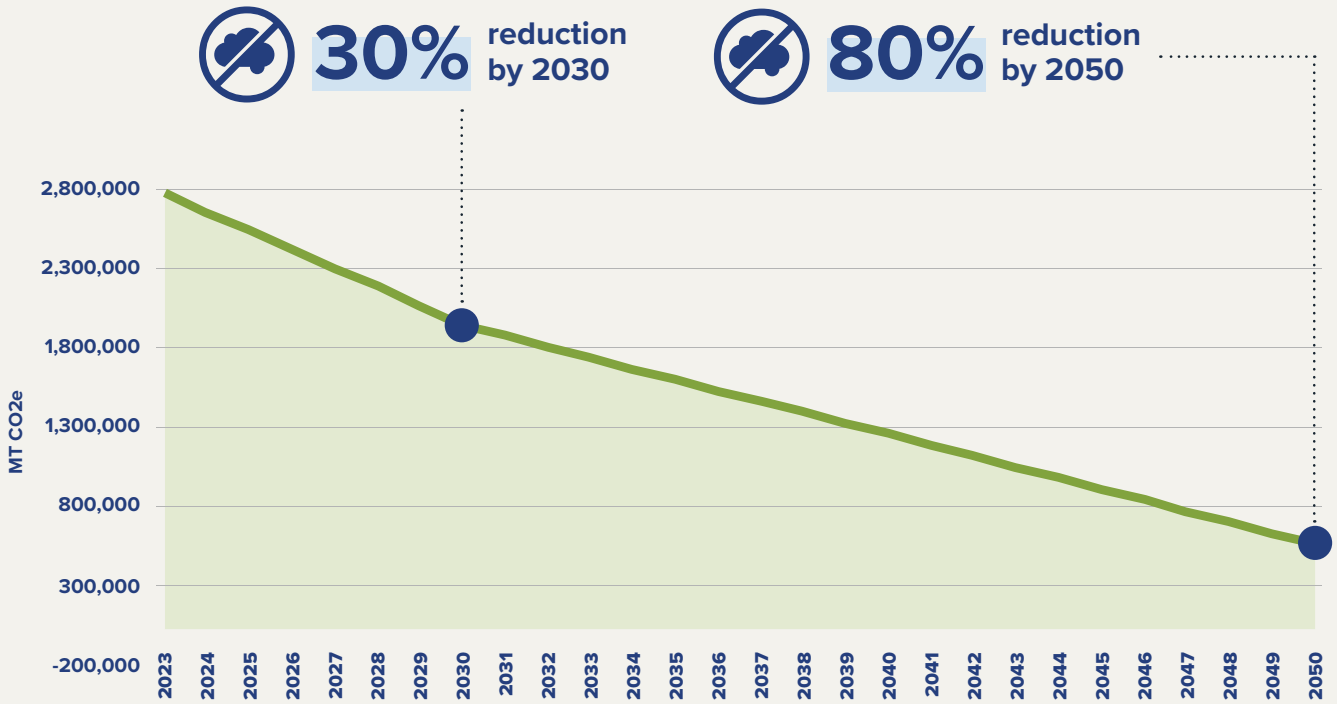
CO_2e emissions in 2023

78.6% Energy

15.0% Transportation

6.4% Solid Waste

GHG REDUCTION GOAL



As the City of Evansville continues to work towards reducing GHG emissions and preparing the community for climate impacts, this document will serve as an evolving strategic plan. The City will re-evaluate local scientific data, community priorities, new technology, and CAP progress to guide an update of this plan every five years. Evansville will strive to be a climate leader in the Hoosier state and will use this plan to inform the community, accelerate change, and positively impact the City's outlook for years to come.

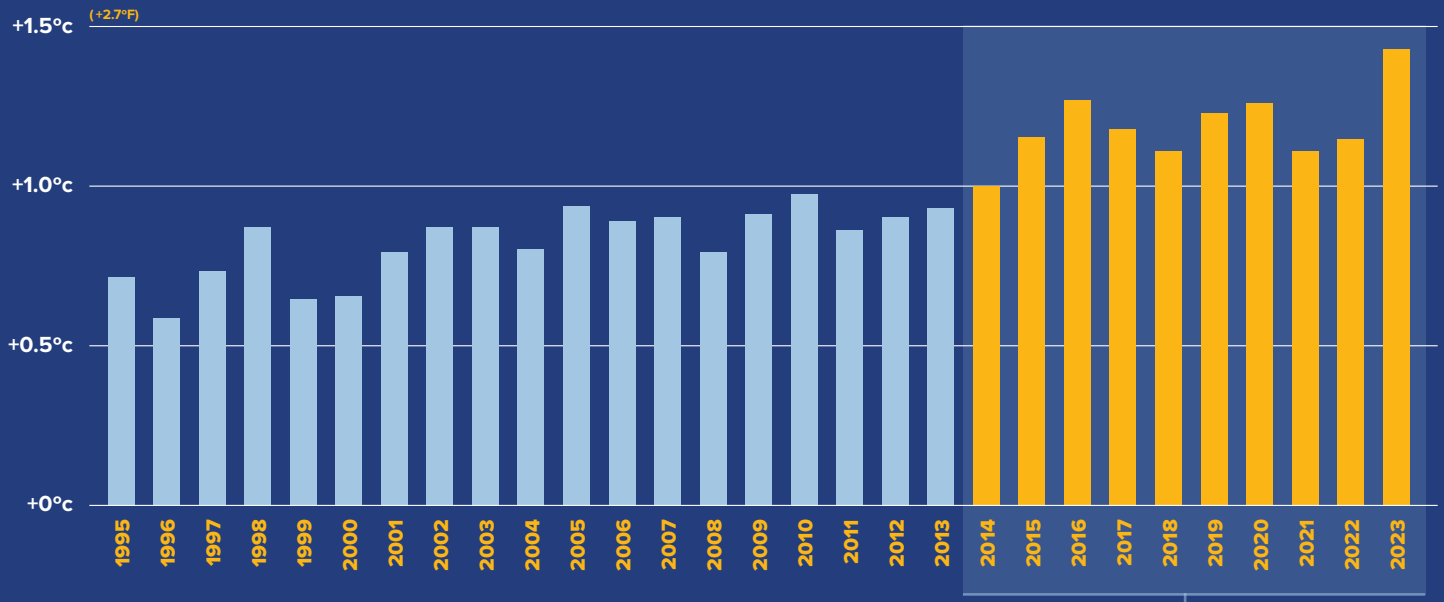
Image credit: Alex Morgan Imaging

INTRODUCTION

Local Changes

The effects of climate change have become increasingly apparent and hard to ignore.

While the Earth's temperature has gradually risen over the past few centuries, the abundance of human activities that rely on fossil fuels has significantly increased GHG emissions and accelerated climate impacts on both a global and local scale (NASA).



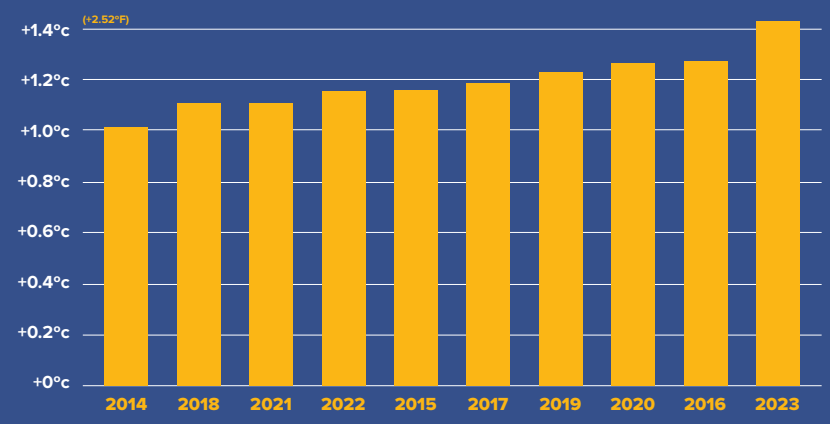
Global temperature anomalies (°C) averaged and adjusted to early industrial baseline (1881-1910).

Data as of 1/12/2024

Source: NASA GISS & NOAA NCEI

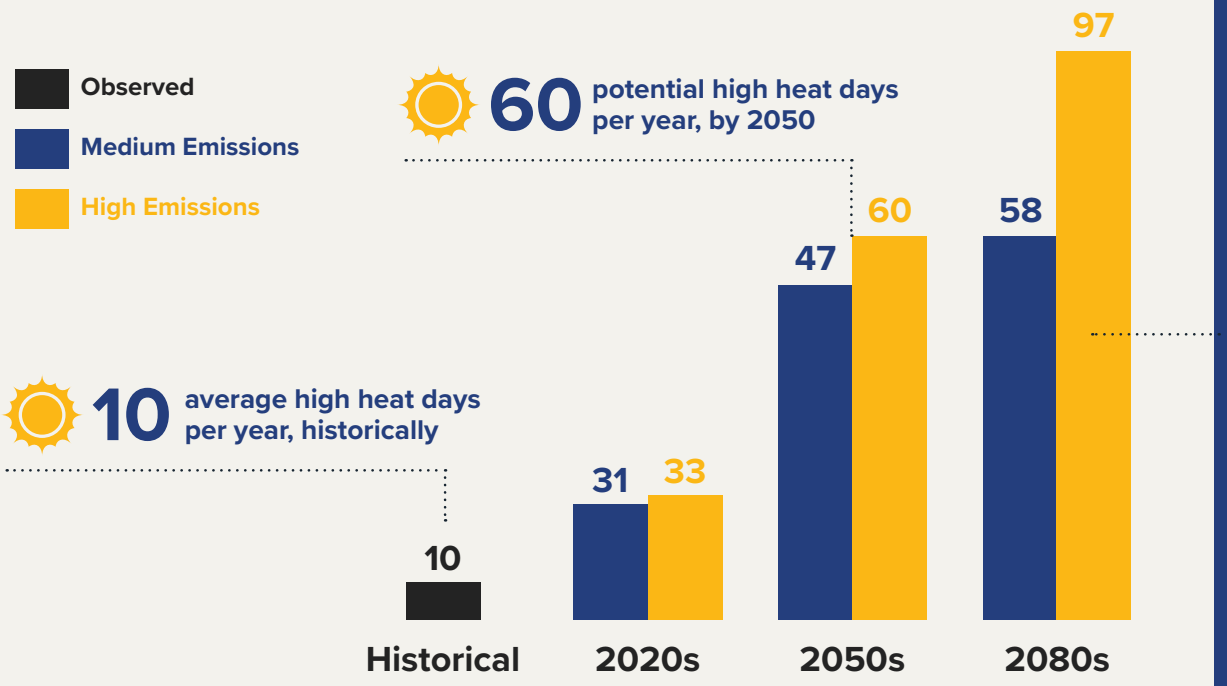
The last ten years are the hottest years ever recorded globally.

10 HOTTEST GLOBAL YEARS ON RECORD



The same trend is evident in Indiana, with longer summers and more extreme heat days on record. According to the Indiana Climate Change Impacts Assessment (2018), Indiana's average temperatures are expected to continue to rise. While the Evansville area historically has, on average, 10 high heat days (above 95°F) per year, climate change could lead to as many as 60 extreme heat days a year by 2050 and up to 97 days by 2080.

NUMBER OF DAYS WITH HIGH TEMPERATURE ABOVE 95°F



97 potential high heat days per year, by **2080**

Indiana will experience other impacts as well. Weather events are predicted to become more frequent and more intense. Precipitation is expected to occur in heavier downpours, particularly during winter and spring when it is least needed. Additionally, excessive heat can lead to a greater risk of drought and wildfires. These changes will increase energy demand and costs, risk public health and safety, and put stress on crops, water systems, and wildlife.

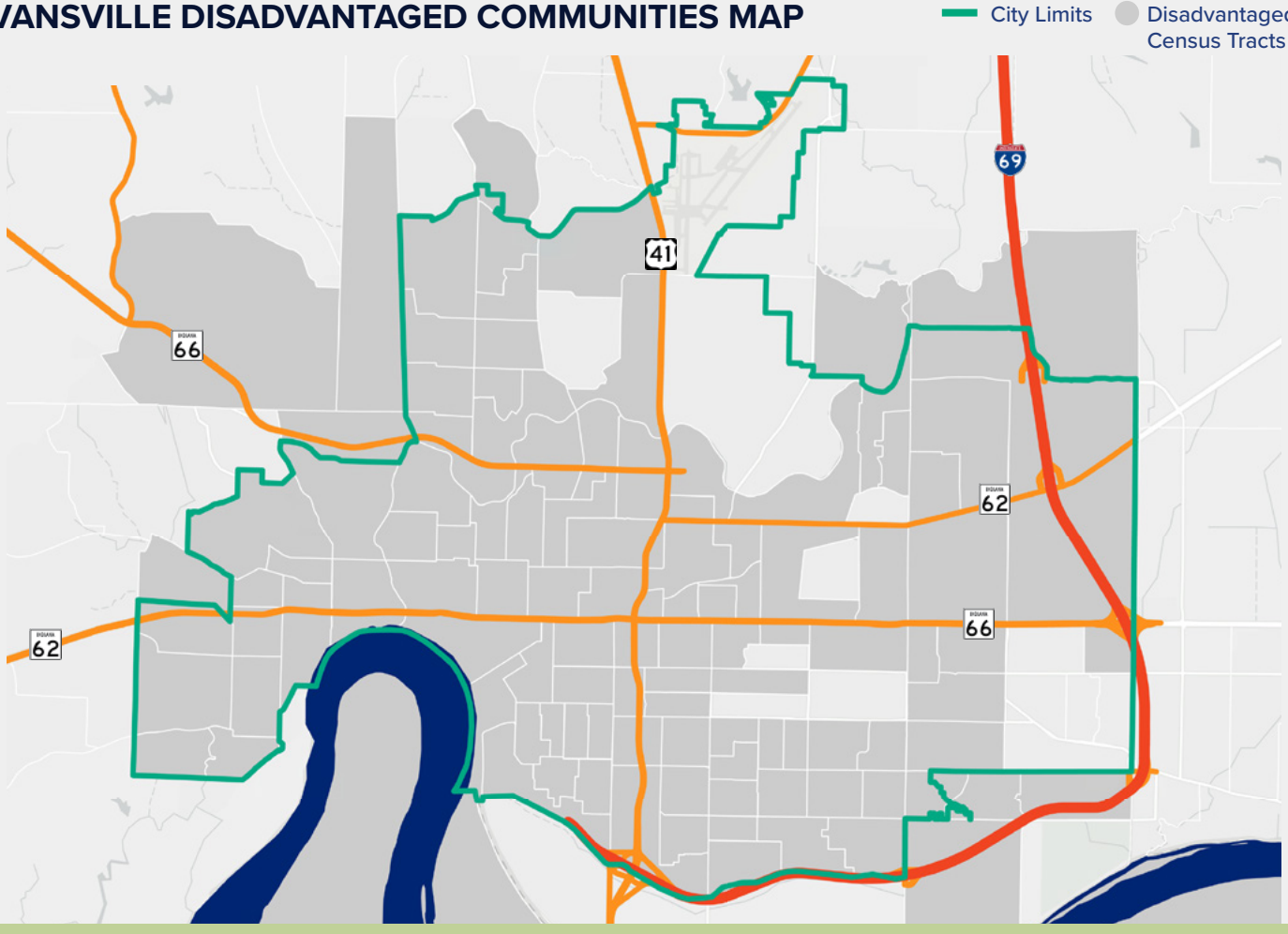
- **Increased costs**
- **Risk to public health**
- **Risk to crops & water**
- **Increase in wildfires**

Local Challenges

The effects of climate change will present new and further challenges to the Evansville community, with some residents facing greater impacts than others.

As the third largest city in the state of Indiana, Evansville experiences a variety of environmental and socioeconomic challenges. According to the U.S. Census Bureau, most of the census blocks in the City's urban core are considered environmental justice areas. Populations and neighborhoods in these areas are underserved and overburdened by energy and environmental hardships.

EVANSVILLE DISADVANTAGED COMMUNITIES MAP



These neighborhoods and populations will feel the effects of climate change more than others. The environmental and socioeconomic challenges that these populations may face can be summarized for each sector...

Source: U.S. Environmental Protection Agency

Image credits (top to bottom): Stock photo, Alex Morgan Imaging, Alex Morgan Imaging, Stock photo

ENERGY

Evansville's infrastructure is outdated and inefficient. Roughly 90% of the homes in the urban core were built before 1970, and 60% were built before 1940, making them extremely energy-inefficient and costly to heat and cool. Many of those households are 18% below the state average household income, yet energy costs are 15% higher than the state average. As the City experiences hotter, longer summers and more severe cold snaps, residents will need more efficient and affordable energy solutions to cope with higher energy demands and costs.

TRANSPORTATION

The north and south neighborhoods of Evansville are divided geographically by the elevated Highway 62 'Lloyd Expressway' and associated ramps. This layout lacks adequate sidewalk access, which would otherwise connect these neighborhoods and encourage active transportation (biking and walking). 51% of households in Evansville are 0-1 car households, yet there is a lack of publicly accessible, low-emission transportation options to meet the demand. As the population grows and vehicle traffic increases, equitable clean transportation options will become a necessity to protect air quality and public health.

LAND

The region's low river valley topography, combined with the high concentration of coal-fired power plants, exacerbates air quality issues, making it one of the most polluted areas in the nation. Evansville has only 24% tree canopy, which contributes to heat retention and swifter moving stormwater runoff. As temperatures climb and rain events intensify, more trees and greenspaces will be needed to cool the environment, slow and store stormwater runoff, and sequester air pollutants.

WASTE

The City of Evansville offers recycling services for most residents; however, the City does not collect all recyclables or provide services for multi-unit housing complexes. In addition, the City lacks options for residents to compost yard waste or food waste. As a result, there are limited options to divert waste from the landfill or from burning, both of which contribute to greenhouse gas emissions. As the population and subsequent waste production grow, more sustainable options will be necessary to dispose of waste responsibly.

Image credit: Joe Atkinson

Evansville must prepare for current and future climate impacts to ensure everyone, especially those most vulnerable, can withstand and recover from them. The City of Evansville prepared this 2025 Climate Action Plan as a step in that direction.

Image credit: Alex Morgan Imaging

OUR APPROACH

The City of Evansville developed the 2025 Climate Action Plan using a comprehensive team approach. The team consulted technical studies and area plans, engaged stakeholders, and thoughtfully crafted strategies and actions.

Technical Studies

The CAP project leaders consulted a variety of technical studies to inform the development of this CAP. Local and regional data was gathered to facilitate science-based decisions in developing climate strategies and actions. ClimateNav completed a 2023 GHG inventory for Evansville, providing valuable insight into the City's GHG emission sources and possible reductions. Davey Resource Group compiled an Urban Tree Canopy Assessment, presenting a picture of tree canopy coverage and rationale for tree and green infrastructure projects. KERAMIDA conducted a Benchmarking Analysis to ensure Evansville's CAP was aligned with those of other Indiana cities, and a Community Plan Review to cross-reference other Evansville area plans for sustainability priorities. **All technical studies are summarized in the "Our Data" section, and can be found in their entirety at evansvilleclimate.com.**

Stakeholder Engagement

The CAP project leaders assembled a diverse team of stakeholders to assist in the development of this CAP. **Over 30 community leaders from local government, regional organizations, non-profit organizations, and businesses participated in stakeholder teams** to guide the process. A Core Team provided oversight on the plan's structure and contents, and five Technical Teams developed strategies and actions according to their expertise for the Energy, Transportation, Waste, Land, and Resiliency sectors. Monthly meetings were conducted for all teams so stakeholders could provide vital input on the development of the CAP.

Strategy Development

The stakeholder teams developed the CAP strategies and actions, starting with those in the original 2021 CAP. They **carefully considered all 48 of the original strategies** to determine how to shape the next CAP. For each strategy, stakeholders considered its achievement status, current relevancy to the community, and timeliness for the next 5 years of implementation. If strategies were deemed no longer relevant or timely, they were set aside. All remaining strategies were updated and streamlined, and several actions were added as new priorities. All 50 of the final actions were refined to ensure they were concise, impactful, actionable, and measurable. This process required months of dedication and extensive input from stakeholders, resulting in a polished list of impactful strategies and actions.

2025 CAP Development

Each technical report, stakeholder meeting, strategy/action edit, and organizational task was a small yet essential piece of the climate action planning puzzle. All pieces were assembled with an explanatory narrative to form the 2025 CAP. While individual actions would do little to move the needle on climate impacts, they can collectively make a large impact as a part of a broader strategic plan. The project leaders, stakeholder teams, the Mayor's office, and City department heads all contributed to the final CAP. The City of Evansville aims to use the plan as **a tool to educate and engage the City and the community to take actions** that will shift the trajectory of greenhouse gas emissions and climate change.

City Approval

The 2025 CAP has the support of Evansville Mayor, Stephanie Terry, and her administration. It will be presented to the Evansville City Council, seeking their approval and adoption in early 2025. The implementation and success of this plan can only be achieved through the collaboration of local government, businesses, organizations, and residents.

Image credit: Joe Atkinson

OUR DATA

The strategies and actions in this plan were identified after a comprehensive review of local and regional scientific data and climate plans. The technical studies consulted are summarized below, all of which can be found in their entirety online at evansvilleclimate.com.

Greenhouse Gas Inventory

The City of Evansville partnered with ClimateNav to conduct a 2023 Community-Wide and Municipal Operations GHG Inventory. The purpose of the inventory was to gather data on Evansville's GHG emissions and their sources to determine the potential for reducing emissions and the City's contribution to climate change.

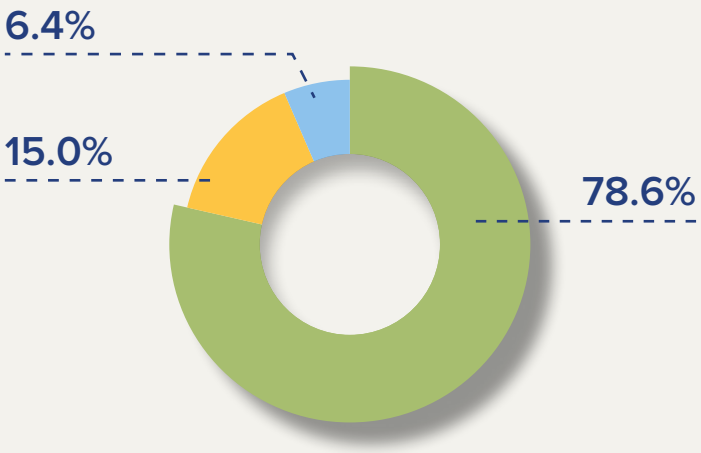
This was the inaugural inventory for the community at large and was a vital tool for the development of this CAP. The results of the study (see **GHG Inventory**) helped to identify strategies and actions that would be feasible, actionable, and measurable, in addition to providing significant reductions in emissions. The inventory provided the baseline data to inform the plan and will provide a measure of success as the plan is implemented.

Both a community-wide and municipal operations inventory were developed. The community-wide inventory includes all GHG emissions within the City boundary and demonstrates the source and scale of the entire City's energy consumption, air emissions, and impacts of daily choices and habits. The municipal operations inventory contributes roughly 3% of the community-wide emissions, focusing only on the emissions from City government operations. This inventory increases the understanding of operational impacts and accountability to make improvements going forward.

The GHG inventory process utilized a comprehensive approach and considered emissions from 3 sectors: Energy, Transportation, and Waste. Emissions from the Energy sector included stationary fuel combustion, grid-supplied electricity, and transmission & distribution loss. Emissions from the Transportation sector included on-road vehicles and air travel. Emissions from the Waste sector included solid waste and wastewater treatment. Due to the high urbanization of the City, Land sector emissions were minimal and omitted.

EMISSIONS BY SECTOR

A summary of community-wide greenhouse gas emissions by sector is as follows:



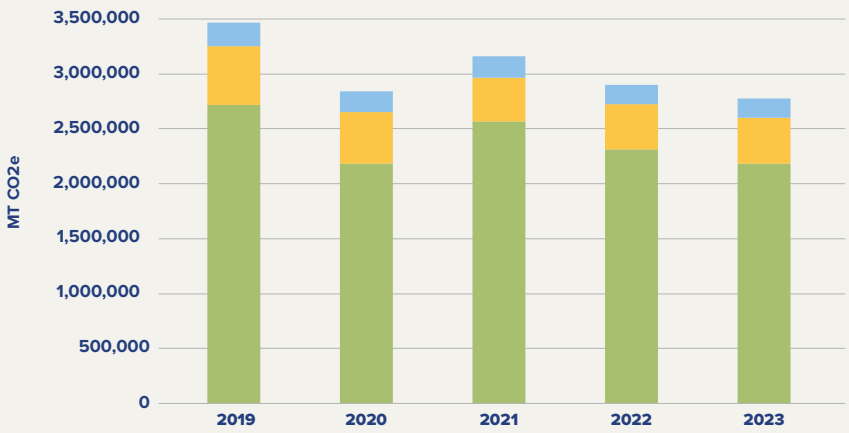
2023 Emissions

2,779,254.9 MT CO_2e

ENERGY TRANSPORTATION WASTE

5 YEAR TREND

The decrease in 2020 emissions are reflective of COVID-19's effect across the community.



GHG emission goals:

30% reduction by 2030

80% reduction by 2050

The GHG inventory process provided valuable data that informed potential GHG emission reduction goals and helped develop strategies and actions to accomplish those goals. These actions can result in a steady decline in emissions (compared to 2023 emissions) over the next few decades: a 30% reduction by 2030 and 80% by 2050. GHG inventories will be conducted bi-annually to measure the impacts of CAP implementation and reassess CAP goals.

Benchmarking Analysis

KERAMIDA completed a Benchmarking Analysis for the City of Evansville to compare and align Evansville's CAP to those of other cities across the state of Indiana.

Evansville's 2021 CAP strategies and actions were benchmarked against three comparable cities. The three cities were chosen - two peers and one aspirational - based on similarities in characteristics such as population, median income, and geographic location. The peer cities were determined to be South Bend, IN, and Lafayette, IN, while the aspirational city was determined to be Carmel, IN. Each city's strategies and actions were compared to those of Evansville, and any progress to date or funding mechanisms were noted.

A heat map (see **Benchmarking Analysis**) was created to show the most common strategies across the three cities and highlight any overlap with Evansville's strategies. The process identified additional strategies that were common across the three cities and strategies that were not apparent across the three cities. The results provided the stakeholder teams with clarity and support to streamline and refine CAP strategies and actions to be both realistic and impactful.

Image credit: Alex Morgan Imaging

Community Plan Review

Before developing CAP strategies and actions, it was crucial to understand the local sustainability culture, how sustainability has been integrated into area plans, and the progress in reaching those goals thus far.

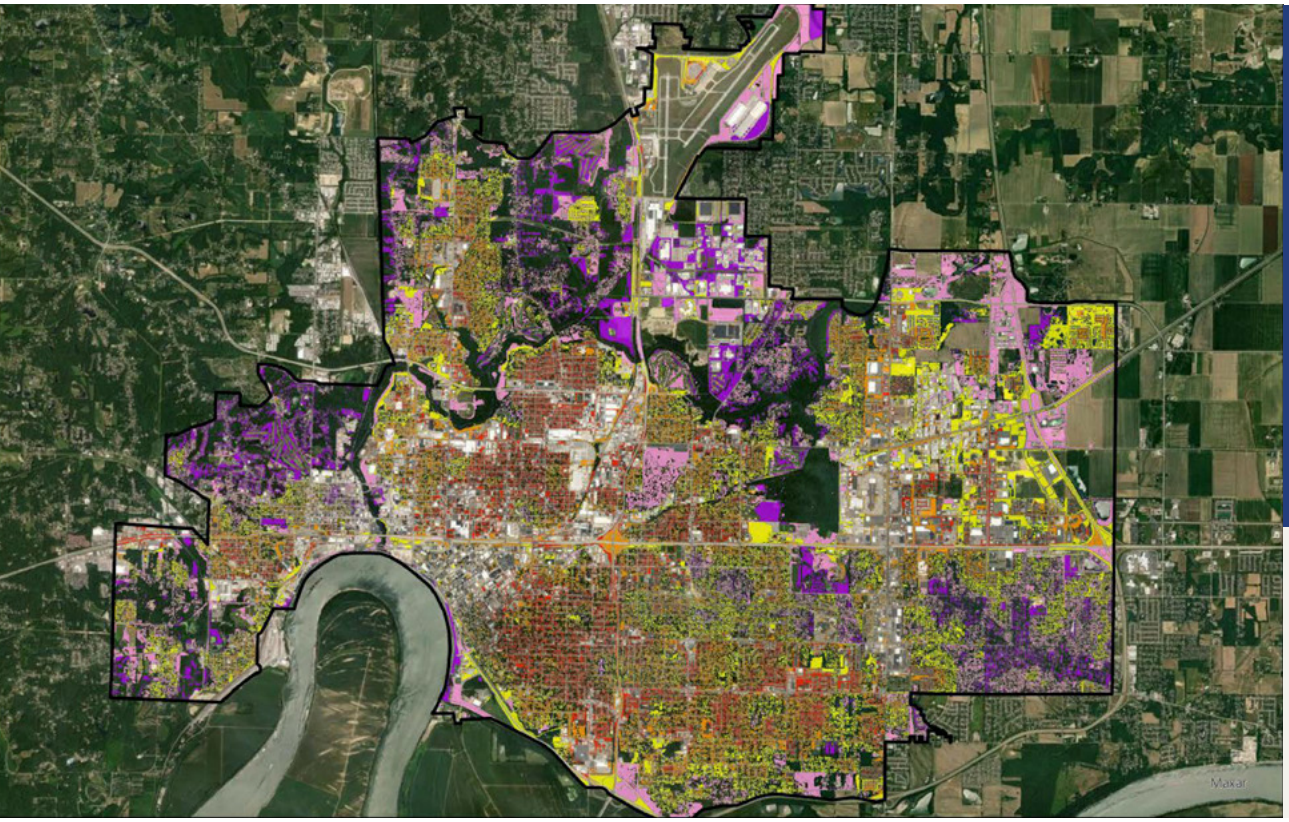
KERAMIDA conducted a Community Plan Review for the City of Evansville to inventory and evaluate all Evansville area strategic and master plans for sustainability initiatives.

The review identified synergies between Evansville's CAP and other area plans and the progress of current and past plans. It also identified strategies and objectives of existing plans that could be streamlined into the revised CAP.

The results of the review are summarized in table format (see **Community Plan Review**). Each table provides an overview of an area plan and a list of relevant strategies that justify and/or overlap with those in Evansville's CAP. The review provided support to the stakeholder team as they streamlined and refined CAP strategies and actions to be feasible and timely for Evansville.

Tree Canopy Assessment

The City of Evansville partnered with the Indiana University Environmental Resilience Institute and consultant Davey Resource Group to conduct an Urban Tree Canopy Assessment in 2024. The purpose of the study was to quantify the existing tree canopy and identify land types and potential planting areas within the City, with the goal of prioritizing actions to increase the tree canopy. The assessment (see **Tree Canopy Assessment**) analyzed a roughly 48 square mile (30,623 acres) area within the municipal city boundary. The following map shows priority planting areas to increase tree canopy:



Current Tree Canopy

7,313
acres

Maximum Tree Canopy

15,590
acres

MAP KEY: PRIORITY PLANTING LEVELS

- Very Low
- Low
- Moderate
- High
- Very High

The results demonstrated Evansville's potential for tree canopy. The current canopy covers only 24% of the City, down 2% from the 2011 assessment.

However, there is a potential for the canopy to cover up to 51% of the City with ideal cooperation from landowners and managers. Evansville is a highly urbanized land area, where 40% consists of man-made surfaces that cannot grow trees or allow infiltration of rainwater, contributing to heat accumulation, retention, and swift stormwater runoff and flooding.

The benefits of tree plantings can include better stormwater management, watershed protection, water quality improvements, temperature moderation and cooling, reduction of air pollutants, and energy conservation. Evansville is designated as a Tree City USA city and will continue to prioritize tree planting to increase tree canopy and its benefits.

Resiliency Assessment

The City of Evansville engaged KERAMIDA to conduct a Resiliency Assessment to investigate the potential hazards, impacts, and risks of climate change specific to the Evansville area.

The purpose of the assessment was to identify potential impacts and vulnerabilities to the people, infrastructure, and economy and identify strategies to **adapt** to and **mitigate** those impacts. The goal is to increase the Evansville community's **resiliency**.

ADAPTATION *(noun)*
Become adjusted to new conditions

MITIGATION *(noun)*
Lessen the effects of; make less severe

RESILIENCY *(noun)*
The capacity to withstand or to recover quickly from difficulties; toughness

Total population
117,298
people in 2020

Median household income
$52,318
18% less than IN avg.

Higher education
24%
6.2% less than IN avg.

The Vanderburgh County Multi-Hazard Mitigation Plan (2018) provided a foundation for understanding historical data and impacts, but it did not consider projections due to climate change. The Resiliency Assessment updated future projections for the probability and magnitude of impacts to account for both historical data and climate changes for the area within city boundaries.

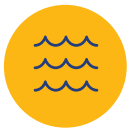
Demographic and socio-economic trends were analyzed first. The 2020 Decennial Census recorded Evansville with a total population of 117,298 people, making it the third-most populous city in Indiana. Since the 2020 Decennial Census, the population is estimated to have decreased by 1.7% and is expected to continue to decline following global trends of urban population dynamics.

Evansville's median household income of $52,318 is 18% less than the Indiana average, with a poverty rate 4.6% higher than the Indiana average. Although many higher education institutions are present, only 24% of Evansville's population holds a bachelor's degree or higher, which is 6.2% lower than the state average. Situated near the Indiana-Kentucky border on an oxbow in the Ohio River, Evansville has a subtropical climate with an average yearly precipitation of 45.31 inches.

Hazards typically present within the City of Evansville and/or have significant historical occurrences were identified as the following:

Droughts

Extreme Temperatures



Flooding

Severe Storms

Tornadoes

Risk and vulnerability assessments were completed for each hazard. The risk level was determined by the likelihood and impact of the hazard event using the formula:

Risk = Likelihood x Impact

The vulnerability assessment analyzed which sectors and populations within the Evansville community are most impacted by the list of hazard events. The result of the assessment is a long list of adaptation strategies that the City can take to increase the resilience of the Evansville community. From the list of adaptation strategies, ten were chosen to focus on within the Resiliency sector of this plan. The Resiliency Assessment in its entirety can be found on the **Evansville Climate website**.

It is important to note that the strategies and actions throughout all sectors of this plan provide some level of resiliency, as well as co-benefits that positively affect the environment, economy, human health, and quality of life.

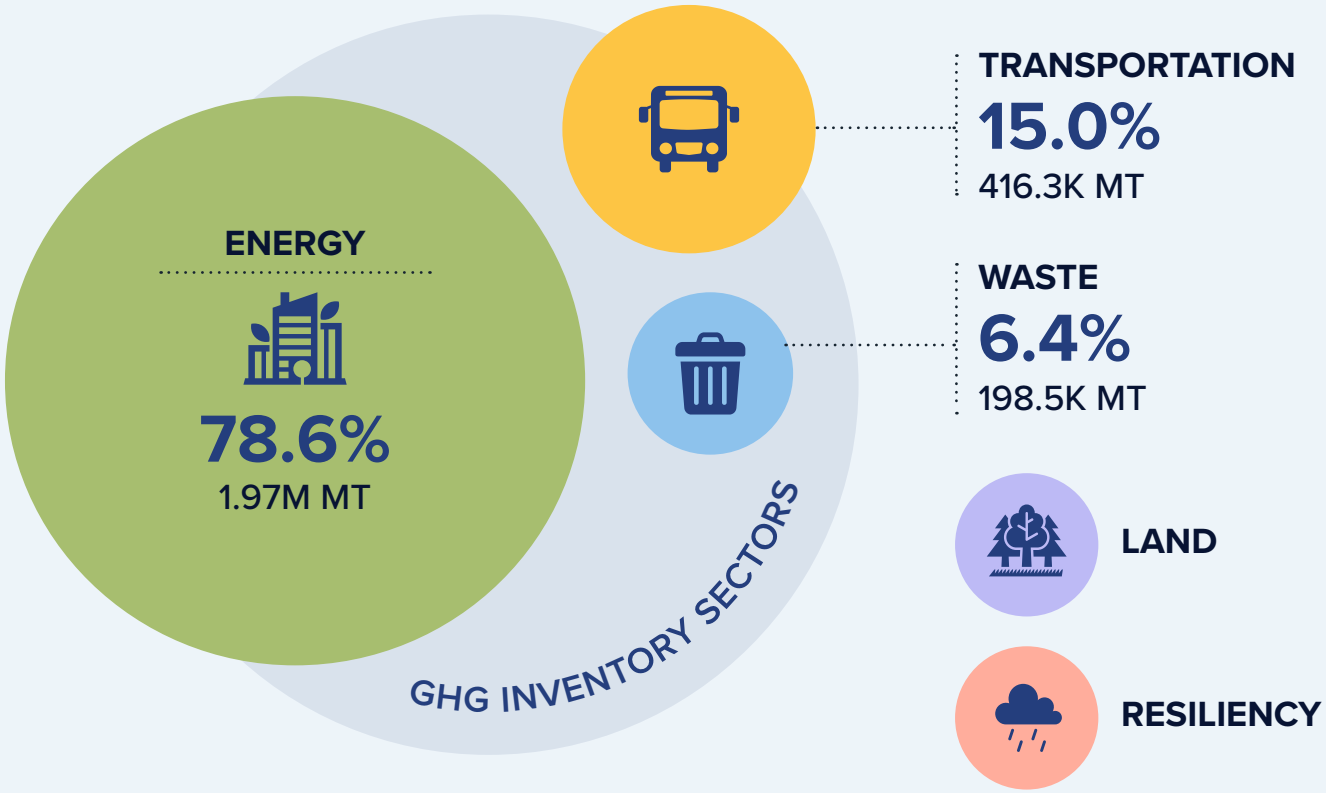
Image credit: Alex Morgan Imaging

OUR PLAN

This plan presents strategies and actions that will contribute to the City of Evansville's goal of reducing GHG emissions 30% by 2030 and 80% by 2050.

The actions are organized into five sectors: Energy, Transportation, Waste, Land, and Resiliency, consistent with those of the 2021 CAP and the 2023 GHG inventory. Each sector has two overarching strategies and ten measurable actions, leading to a **combined total of 50 actions across all sectors**. Each action is presented with a timeline, cost, and GHG impact. All actions can be relevant and applicable to local municipalities, organizations, businesses, education institutions, coalitions, and even individuals.

THE FIVE SECTORS



Plan Key

IMPLEMENTATION TIMELINE

 = **Near-term**
Action can be achieved within 5 years

 = **Mid-term**
Action can be achieved within 5-15 years

 = **Long-term**
Action can be achieved within 15-25 years

COST

$ = **Low Cost**
Action can be implemented using existing budgets

$$ = **Medium Cost**
Action requires reassessment of budget or support from partners and sponsors

$$$ = **High Cost**
Action requires advance planning, capital expense, or outside financial support

GHG IMPACT

 = **Low Impact**
Action will minimally reduce GHG emissions

 = **Medium Impact**
Action will moderately reduce GHG emissions

 = **High Impact**
Action will significantly reduce GHG emissions

CO-BENEFITS

The actions in this plan will not only reduce greenhouse gas emissions but will also deliver many other benefits to the community. **The co-benefits that we are likely to experience include:**

- ★ Improving air quality
- ★ Improving public health
- ★ Improving mobility
- ★ Enhancing energy security
- ★ Reducing costs
- ★ Supporting local economy
- ★ Enhancing equity
- ★ Increasing local resilience
- ★ Supporting biodiversity
- ★ Improving the quality of life/place

WHAT CAN YOU DO?

Reaching ambitious climate and sustainability goals requires collective action by all members of the community. A list of easy, actionable items has been provided for ways to help! In addition, see the Evansville Effect at the end of the CAP for a flyer to share!

SECTOR:

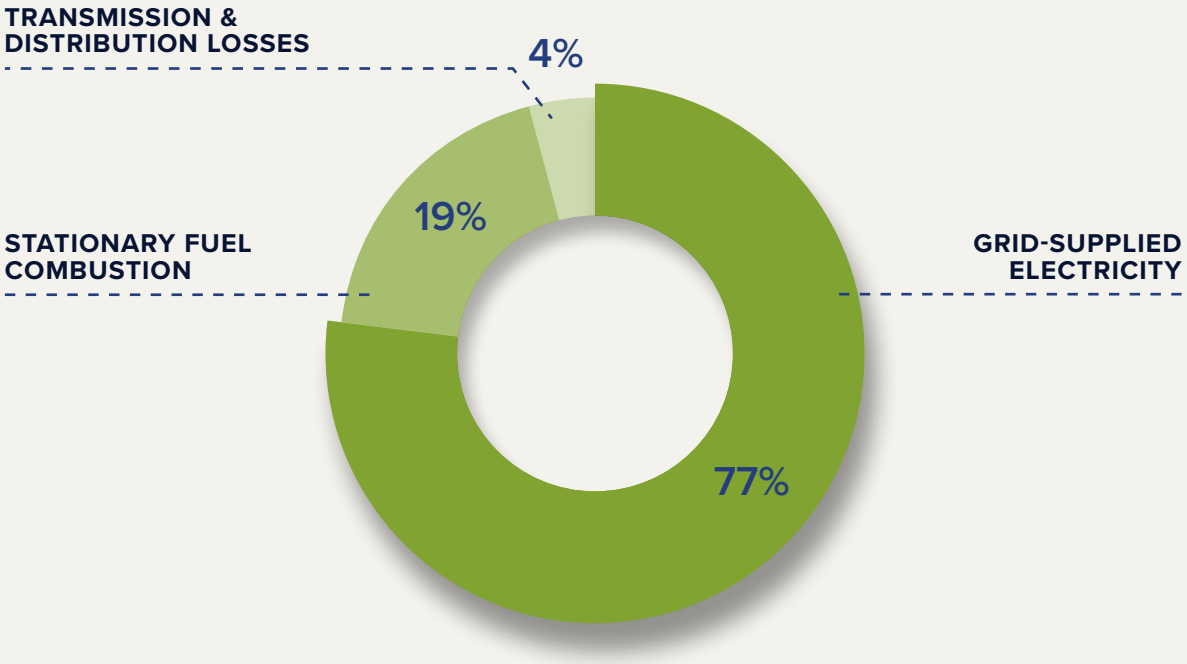
ENERGY

SECTOR:

ENERGY

Energy use is the largest contributor to Evansville's carbon footprint. Throughout the City, stationary energy accounts for 78.6% of GHG emissions.

Energy is used in residential, commercial, and industrial structures throughout the City. Natural gas is used for heating or cooking, and electricity is used for heating, cooling, lighting, and to power appliances and electronics. Approximately **46% of Evansville's natural gas combustion** and **82% of grid-supplied electricity** are consumed for residential spaces, demonstrating the importance of changing daily habits and taking responsibility for energy use in our homes. It is crucial to take action to reduce overall energy use to significantly reduce future climate impacts.



SECTOR:

ENERGY

78.6% of GHG emissions

	Action	Timeline	Cost	GHG Impact
	STRATEGY: INCREASE ENERGY EFFICIENCY			
E1	Expand utilization of state and utility energy efficiency, weatherization & electrification incentive programs through education and advocacy.		$$	
E2	Promote energy efficiency improvements for low-income households through financial assistance and incentive programs.		$$	
E3	Encourage builders and developers to utilize CenterPoint's financial incentive programs, particularly in affordable and multi-unit housing projects.		$	
E4	Audit energy use of municipal buildings and equipment and install energy efficiency improvements.		$$$	
	STRATEGY: TRANSITION TO RENEWABLE ENERGY			
E5	Advocate for zero carbon, renewable energy goals - including community-owned/distributed energy - in the development of the CenterPoint Integrated Resource Plan.		$$	
E6	Advocate for clean energy transition education and training of local workforce through local education and trade partners.		$$	
E7	Promote residential and commercial solar energy installations through policy and incentive programs, particularly in energy-overburdened and underserved areas.		$	
E8	Streamline solar installations by achieving advanced levels of SolSmart certification.		$$$	
E9	Improve energy efficiency of municipal facilities through procurement of energy-efficient products and renewable energy systems.		$$$	
E10	Install solar generation capacity at municipal water and wastewater facilities to reduce electricity demand.		$$$	

SECTOR:

ENERGY

78.6% of GHG emissions

Co-Benefits:

Enhances energy security, reduces costs, supports local economy, improves air quality, increases local resiliency, and enhances equity.

What can you do?

- Utilize natural light whenever possible.
- Unplug appliances when not in use (printer, toaster, etc.).
- Take advantage of energy efficiency programs and rebates.
- Utilize Centerpoint's home energy audits.
- Replace lighting with LED.
- Install smart thermostats – resist high cooling and heating.
- Seal, insulate, and weatherize your home.
- Install energy-efficient appliances.
- Install solar panels.

SECTOR:

TRANSPORTATION

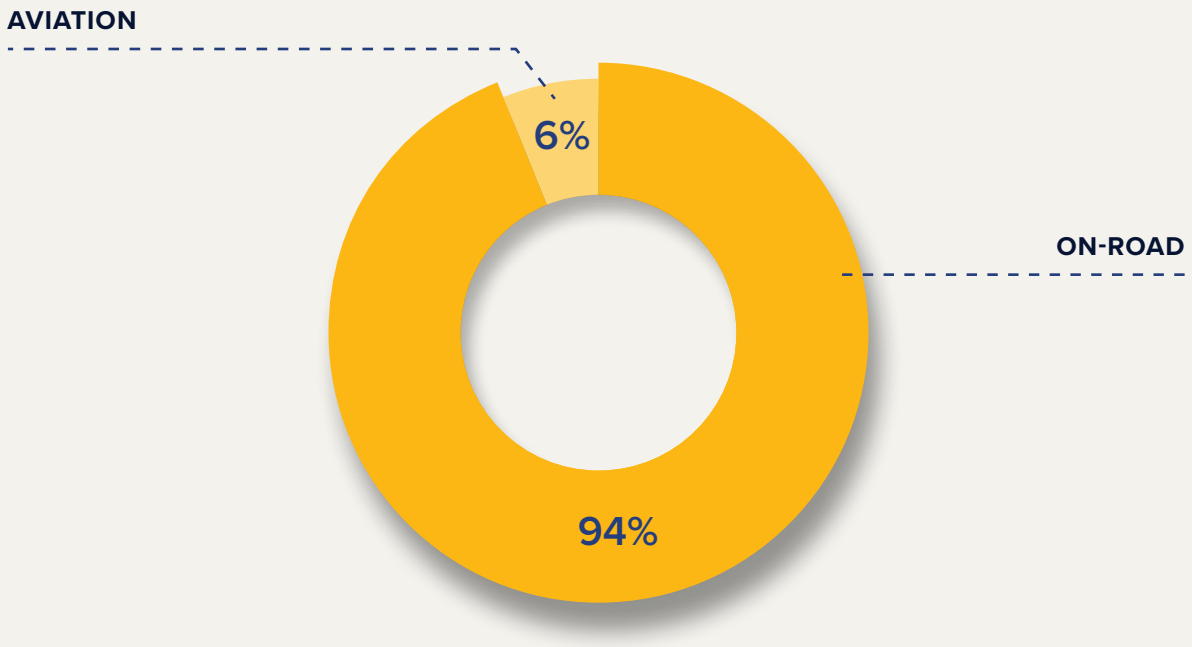
Image credit: Joe Atkinson

SECTOR:

TRANSPORTATION

Transportation is a major contributor to the City's carbon footprint and is responsible for 15.0% of Evansville's GHG emissions.

Transportation emissions are a direct result of the combustion of vehicle fuels such as gasoline, diesel, and jet fuel, by both on-road vehicles and airplanes departing Evansville. Transportation emissions depend on the type of vehicle: light-duty vehicles **(passenger cars and trucks) contribute 87%** of the City's transportation emissions, medium-duty vehicles (larger commercial trucks and vans) contribute 5%, and heavy-duty vehicles (buses and trucks used for freight) contribute 2%, with the remaining 6% coming from aviation. Since every individual seeks mobility to travel to home, work, and school, community members must do their part to find cleaner alternatives for transportation needs. Not only will cleaner vehicles reduce GHG emissions, but they will also improve air quality throughout the City.



SECTOR:

TRANSPORTATION

15.0% of GHG emissions

	Action	Timeline	Cost	GHG Impact
	STRATEGY: REDUCE VEHICLE MILES TRAVELED			
T1	Increase public, shared, and active transportation through community education and outreach.		$	
T2	Increase public transportation utilization and connectivity by expanding regional transport options and transition hubs.		$$$	
T3	Increase METS public transit ridership through promotion, incentives, and service improvements.		$$	
T4	Increase biking and walking by expanding the trails system network according to the Master Trails Plan and Complete Street Policies.		$$$	
T5	Increase bicycling/walking and achieve Bicycle / Walk Friendly Community status through promotion and infrastructure improvements.		$$	
	STRATEGY: TRANSITION TO LOW EMISSION VEHICLES			
T6	Increase alternative fuel vehicle adoption through education, promotion, and incentives.		$$	
T7	Increase electric vehicle (EV) usage by installing publicly accessible EV charging stations.		$$$	
T8	Increase alternative fuel vehicle infrastructure in new development through policies and incentives, particularly for affordable housing.		$$$	
T9	Transition municipal fleet vehicles to electric, hydrogen, or biofuels through improvements in fleet management and procurement policies.		$$$	
T10	Minimize vehicle idling through advocacy and anti-idling zones.		$	

SECTOR:

TRANSPORTATION

15.0% of GHG emissions

Co-Benefits:

Improves air quality, improves public health, improves mobility, increases local resilience, improves quality of life/place, enhances equity, and reduces costs.

What can you do?

- Conduct virtual meetings to reduce travel.
- Work from home when possible.
- Walk/bike to your destination whenever possible.
- Utilize METS public transportation.
- Carpool and consolidate trips.
- Avoid idling by turning off vehicle when parked.
- Upgrade to an electric or hybrid vehicle.

SECTOR:

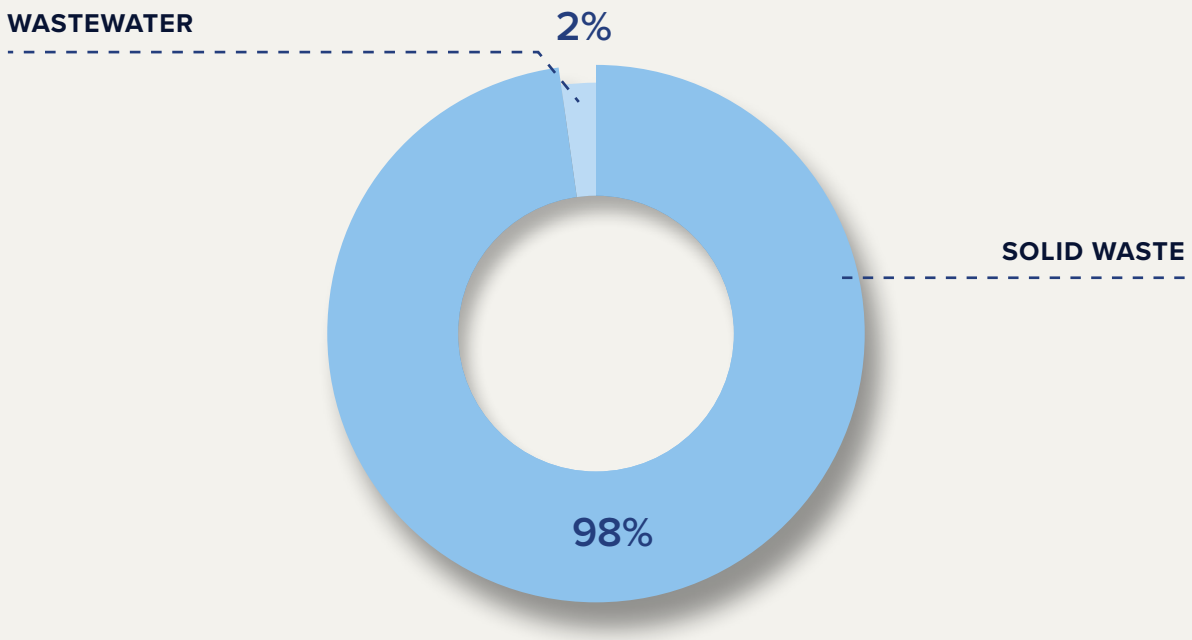
WASTE

SECTOR:

WASTE

The Waste sector includes both solid waste and wastewater treatment, collectively contributing 6.4% of Evansville's GHG emissions.

Waste emissions are primarily methane gas (CH_4), a potent GHG with a greater global warming potential than carbon dioxide (CO_2). Methane is produced by anaerobic (without oxygen) decomposition of organic waste in landfills and in wastewater treatment processes. The majority (98%) of Evansville's waste is in the form of solid waste, and **nearly 400,000 pounds of solid waste was landfilled in 2023**. As all community members generate waste in some way, shape, or form, it is important for all residents to get involved in seeking waste reduction and alternative disposal options.



SECTOR:

WASTE

6.4% of GHG emissions

	Action	Timeline	Cost	GHG Impact
	STRATEGY: INCREASE RECYCLING AND COMPOSTING			
W1	Facilitate municipal composting by identifying and advancing composting options and services.		$$	
W2	Facilitate composting of food and yard waste through community education and outreach.		$	
W3	Improve and expand community-wide recycling options and services.		$$	
W4	Increase residential recycling rate through community education and outreach.		$	
W5	Increase recycling collection for businesses and multi-unit housing through policies and incentives.		$$	
W6	Increase recycling rate at municipal facilities by procuring collection bins and services.		$$	
W7	Identify and prioritize resources to build capacity for municipal waste management.		$$	
	STRATEGY: PREVENT WASTE AT SOURCE			
W8	Reduce commercial and industrial waste through circular economy and green procurement projects, partnerships, and policies.		$$$	
W9	Minimize waste at public events and venues through advocacy and recognition programs.		$$	
W10	Reduce municipal waste through the adoption of green procurement policies and guidelines.		$$	

SECTOR:

WASTE

6.4% of GHG emissions

Co-Benefits:

Supports local economy, reduces costs, improves air quality, and improves quality of life/place.

What can you do?

- Avoid fast fashion and donate clothing instead of throwing away.
- Use reusable shopping bags.
- Buy in bulk to minimize packaging waste.
- Reduce waste production (purchase less goods).
- When possible, repair/refurbish items to avoid buying new.
- Minimize or eliminate single-use plastic items.
- Recycle more and reuse what you can.
- Compost food and yard waste at home.

SECTOR:

LAND

Image credit: Alex Morgan Imaging

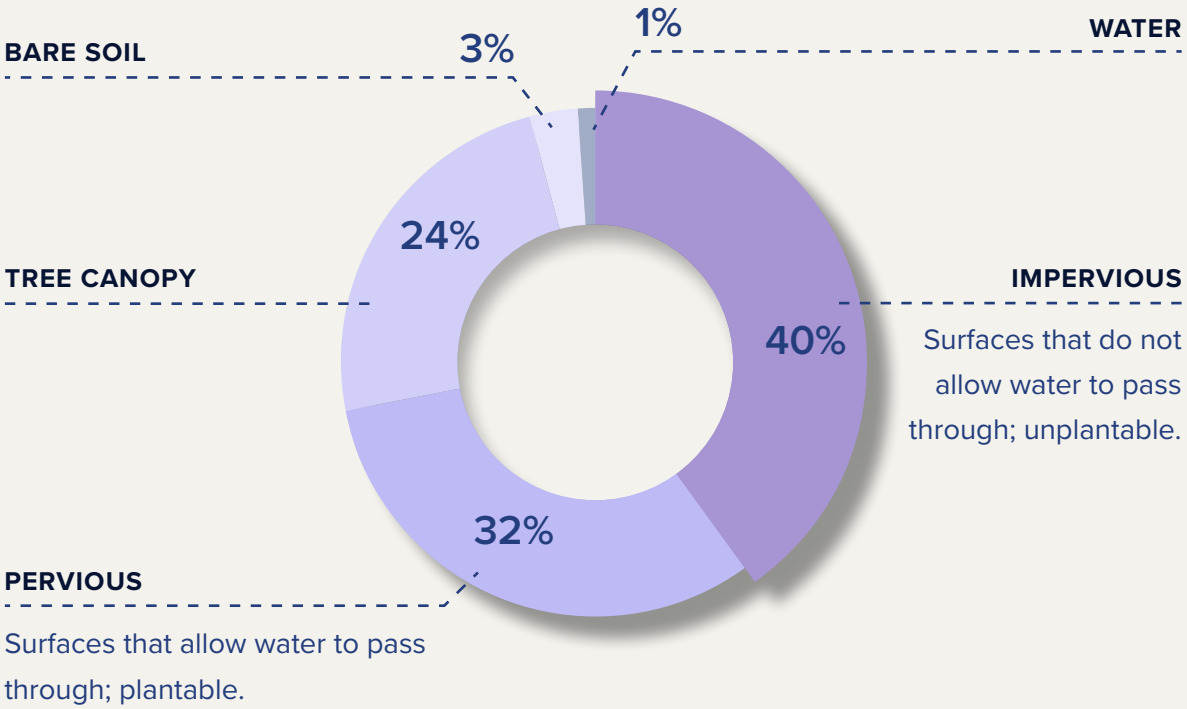
SECTOR:

LAND

Land uses such as forests, wetlands, and parks are home to plants, water, and soil which store carbon and keep it out of the atmosphere.

Man-made urban land uses often contribute to the climate problem, contributing to energy and transportation emissions while retaining heat. Global protocols for reporting GHG emissions include emissions from agriculture, forestry, and other land uses (AFOLU). Given Evansville's high level of urbanization and lack of agricultural land uses, **emissions from this sector were considered minimal** and excluded from the GHG inventory. However, the City of Evansville will still promote actions to increase green spaces and green infrastructure to advocate for sustainable development and facilitate carbon storage.

EVANSVILLE LAND COVER



SECTOR:

LAND

	Action	Timeline	Cost	GHG Impact
	STRATEGY: INTEGRATE GREEN INFRASTRUCTURE & AGRICULTURE			
L1	Increase tree plantings using native & site-appropriate species, maintaining Tree City USA status.	→	$$	☁
L2	Increase tree canopy through reforestation of underutilized and brownfield areas.	→	$$	☁☁
L3	Increase green infrastructure in right of ways and land developments by updating local requirements.	→	$	☁
L4	Increase the number of community food gardens & orchards through public/private partnerships.	→	$$	☁
L5	Promote local agriculture and plant-based food sourcing through educational and agricultural partnerships.	→	$$	☁
	STRATEGY: ENCOURAGE CLEAN & SUSTAINABLE LAND MANAGEMENT			
L6	Increase native plantings and site-appropriate landscaping through education, policies, and incentives.	→	$	☁
L7	Reduce mowed acres of municipal land by replacing with site-appropriate and native plant species.	→	$$	☁
L8	Transition municipal property maintenance equipment to EV, hybrid, or biofuels by updating procurement policies and guidelines.	→	$$$	☁
L9	Demonstrate responsible chemical and water use on public and municipal properties.	→	$	☁
L10	Minimize mowing during designated Indiana Department of Environmental Management (IDEM) air quality alert days to reduce ozone.	→	$	☁

SECTOR:

LAND

Co-Benefits:

Improves air quality, improves public health, improves quality of life/place, supports biodiversity, increases local resilience, and reduces cost.

What can you do?

- Reduce water and chemical use on property.
- Include native plants and trees in landscaping.
- Reduce size of lawn and mowing frequency.
- Adopt a plant-rich diet to reduce impact of animal farming.
- Buy food at local farms/farmers' markets.
- Start a personal or community garden.
- Transition gas lawn equipment to electric.

SECTOR:

RESILIENCY

Image credit: Sam Owens, Courier & Press Archives

SECTOR:

RESILIENCY

Evansville is already experiencing climate impacts such as excessive temperatures, intense and frequent storms, and wildfire smoke.

CURRENT RISKS

Hazard	Likelihood (1-5)	Impact (1-5)	Risk (L x I)	Fatalities (to date)	Injuries (to date)	Economic Loss (Million USD)
Drought	2	1	2	0	0	**$3.03**
Extreme Temperatures	4	3	12	5	16	**$0**
Flooding	3	4	12	1	2	**$6.36**
Severe Storms	3	3	9	1	2	**$12.33**
Tornadoes	3	3	9	20	210	**$19.95**

The City needs to **proactively plan and prepare for present and future concerns**. Therefore, an assessment was conducted of natural hazards and risks due to climate change. A corresponding list of adaptation strategies was developed that can help the entire City prepare, adapt, and recover from climate impacts.

SECTOR:

RESILIENCY

	Action	Timeline
	STRATEGY: IMPROVE RESILIENCE TO EXTREME WEATHER	
R1	Increase tree canopy and greenspace around built environments to mitigate urban heat retention.	
R2	Increase light-colored flat surfaces in built environments (pavements, rooftops) to minimize urban heat retention.	
R3	Expand availability and access to community cooling & warming centers through community partnerships.	
R4	Expand availability and access to safe refuge shelters for severe weather through community partnerships.	
R5	Expand availability and access to public facilities that are solar-powered with battery backup for electrical grid outages.	
R6	Expand green infrastructure to capture stormwater runoff during intense rainfall and store for later use or treatment.	
R7	Restore natural systems such as wetlands, forests, and floodplains to maximize groundwater infiltration/recharge and minimize flooding.	
	STRATEGY: INCREASE AWARENESS & EQUITY	
R8	Increase public awareness about air quality, climate impacts, and community resiliency through education and outreach.	
R9	Identify and prioritize overburdened and under-resourced populations for resiliency improvements through community engagement.	
R10	Improve vulnerabilities & equity identified in the Evansville Resiliency Assessment through local policies, practices, and funding.	

SECTOR:

RESILIENCY

Co-Benefits:

Increases local resilience, enhances energy security, enhances equity, and improves quality of life/place.

What can you do?

- Have a plan for seeking shelter in severe weather.
- Identify ways to stay warm or cool during extreme temperature events.
- Advocate for sustainable policies/practices at work and at home.
- Volunteer with environmental, conservation, or climate groups in your community.
- Plant trees to shade your home.
- Prepare for blackouts with a solar-powered battery bank or generator.

Image credit: Alex Morgan Imaging

OUR FUTURE

Image credits (top to bottom): Joe Atkinson, Lorie Van Hook

City Celebrations

Evansville has much to celebrate! The community is already taking action through a variety of partnerships, programs, and projects.

ENERGY

The City of Evansville achieved a SolSmart Bronze designation that will streamline the solar permitting process and reduce barriers to solar energy.

Evansville Regional Airport invested in a parking lot solar canopy that provides 50% of the airport terminal's power.

The City of Evansville conducted energy audits on 13 municipal buildings to identify ways to reduce energy use and save on energy costs.

CenterPoint Energy and the City Engineer's office have partnered to convert streetlights to high-efficiency LEDs.

TRANSPORTATION

The City of Evansville partnered with regional organizations to win a $20M Community Change Grant to fund a transition to lower-emission transportation methods.

Metropolitan Evansville Transit System (METS) has adopted 10 hybrid public transit buses.

The City of Evansville was certified as an EV-friendly workplace by EMPOWER and Drive Clean Indiana.

The Evansville Trails Coalition maintains an "Upgrade" bike rideshare program for residents.

Image credits (top to bottom): Alex Mogran Imaging, Joe Atkinson

City Celebrations (cont.)

LAND

The City of Evansville has maintained “Tree City USA” status by the Arbor Day Foundation since 2003.

Evansville Forest Alliance will plant over 1,000 trees to expand the urban tree canopy and improve air quality in underserved and energy-overburdened neighborhoods.

The City of Evansville achieved an IDEM Clean Community designation by demonstrating its commitment to a clean and more sustainable community.

The City of Evansville amended its city Weed Ordinance to permit appropriate native plants and landscaping on residential properties.

WASTE

Citizen groups have partnered with Tri-State Resource Recovery to provide a drop-off option for glass and other recyclables to ensure they are available for everyone.

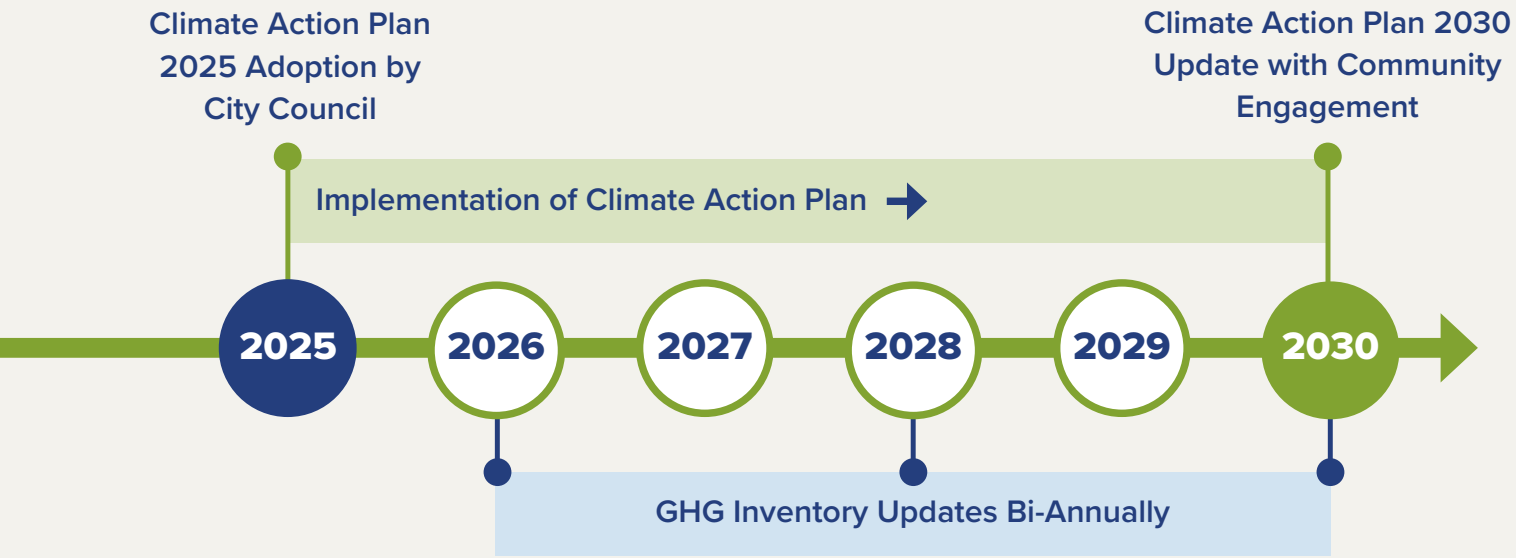
City and County agencies have partnered to conduct a feasibility study to explore a community-wide composting program

The Evansville Water and Sewer Utility captures waste biogas from anaerobic digesters to use as energy for its operations.

The City of Evansville offers curbside single-stream recycling, and 65% of households participate.

As cities across the world begin to prioritize climate action and greenhouse gas reduction, the City of Evansville is proud to participate in the development of this CAP. However, climate action planning will be a dynamic, ever-changing process. Evansville remains committed to continual assessment of the evolving science, global and local conditions, and updates to this plan. The City will continue to do its part to ensure a safer, healthier, and more resilient future.

Timeline



Top Actions for High Impact:

- Advocate for zero carbon, renewable energy methods of electricity generation.
- Promote installation of residential and commercial solar systems.
- Increase public transportation utilization and connectivity.
- Expand safe biking and walking trail systems.
- Increase urban tree canopy in underutilized and brownfield areas.
- Improve and expand community-wide recycling options and services.

CLIMATE ACTION PLAN 2025

EVANSVILLE EFFECT

City of Evansville INDIANA

How can you help?

Everyone has a role to play to help make our community a more sustainable and healthier place to live. There are many ways that you can get involved and take action at every level, even in your own home! While each action may seem small, **collectively, we can make a huge difference**.

ENERGY

- ☐ Utilize natural light whenever possible.
- ☐ Unplug appliances when not in use (printer, toaster, etc.).
- ☐ Take advantage of energy efficiency programs and rebates.
- ☐ Utilize Centerpoint's home energy audits.
- ☐ Replace lighting with LED.
- ☐ Install smart thermostats – resist high cooling and heating.
- ☐ Seal, insulate, and weatherize your home.
- ☐ Install energy-efficient appliances.
- ☐ Install solar panels.

TRANSPORTATION

- ☐ Conduct virtual meetings to reduce travel.
- ☐ Work from home when possible.
- ☐ Walk/bike to your destination whenever possible.
- ☐ Utilize METS public transportation.
- ☐ Carpool and consolidate trips.
- ☐ Avoid idling by turning off vehicle when parked.
- ☐ Upgrade to an electric or hybrid vehicle.

WASTE

- ☐ Avoid fast fashion and donate unwanted clothing.
- ☐ Use reusable shopping bags.
- ☐ Buy in bulk to minimize packaging waste.
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- ☐ When possible, repair/refurbish items to avoid buying new.
- ☐ Minimize or eliminate single-use plastic items.
- ☐ Recycle more and reuse what you can.
- ☐ Compost food and yard waste at home.

LAND

- ☐ Reduce water and chemical use on property.
- ☐ Include native plants and trees in landscaping.
- ☐ Reduce size of lawn and mowing frequency.
- ☐ Adopt a plant-rich diet to reduce impact of animal farming.
- ☐ Buy your food at local farms/farmers' markets.
- ☐ Start a personal or community garden.
- ☐ Transition gas lawn equipment to electric.

RESILIENCE

- ☐ Have a plan for seeking shelter in severe weather.
- ☐ Identify ways to stay warm or cool during extreme temperature events.
- ☐ Advocate for sustainable practices at work and home.
- ☐ Volunteer for sustainability projects in your community.
- ☐ Plant trees to shade your home.
- ☐ Prepare for blackouts with a solar-powered battery bank or generator.

Boost your impact and share this checklist (**download PDF**)

City of Evansville
INDIANA