



STATION 1 INTRODUCTION

WHAT IS A SUSTAINABILITY PLAN?

A **SUSTAINABILITY PLAN** is a roadmap that helps Wake Forest protect what we value today—our clean water, natural areas, safe neighborhoods, and vibrant community—while making sure future generations can enjoy those same benefits. It outlines practical steps the Town and its residents can take to use resources wisely, reduce risks, and support a healthy, thriving community for everyone.

The Plan will look at key topics that affect daily life in Wake Forest, including energy use, transportation, land use, water quality, natural ecosystems, waste, and community resilience. It combines technical analysis with community input to understand where we are today, what challenges and opportunities lie ahead, and what actions will make the biggest positive impact.

By setting a shared vision, clear goals, and actionable strategies, the Sustainability Plan will guide Town decisions, investments, and policies so Wake Forest can grow responsibly, strengthen its resilience to climate and weather impacts, and enhance quality of life for all residents—now and in the future.

TIMELINE AND STEPS

FALL 2025–WINTER 2026

FALL 2025–SPRING 2026

SPRING 2026–FALL 2026

LATE 2026

BASELINE



- ✓ Existing Town, County, and State plan and policy review
- ✓ Greenhouse Gas Inventory
- ✓ Vulnerability Assessment
- ✓ Peer Analysis

ENGAGEMENT



- ✓ Focus Groups
- ✓ Steering Committee
- ✓ Presentations
- ✓ Open Houses
- ✓ Survey

STRATEGY



- ✓ Strategy Development
- ✓ Evaluation and Prioritization
- ✓ Implementation
- ✓ Plan Drafting

FINAL PLAN



- ✓ Plan adoption

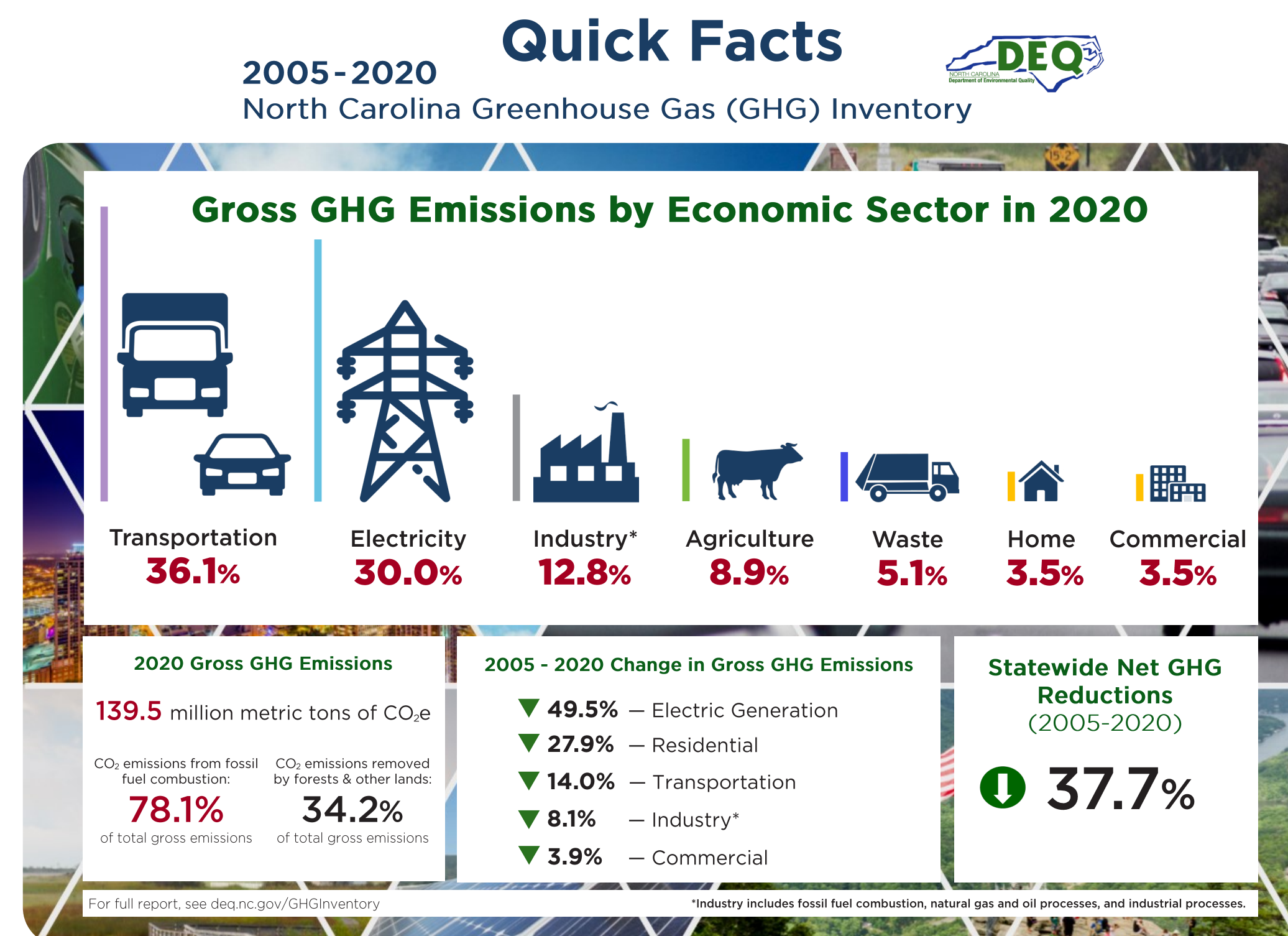




STATION 2 GREENHOUSE GAS INVENTORY

WHAT ARE GREENHOUSE GASES AND WHY ARE THEY IMPORTANT?

Greenhouse gases (GHG)—like carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O)—trap heat in the atmosphere and keep Earth warm enough for life. Human activities such as burning fossil fuels and removing forests add excess GHGs, which intensifies the natural greenhouse effect. This leads to warmer temperatures, heavier rainfall, stronger storms, and other climate impacts that affect our environment and daily lives.



HOW IS A GREENHOUSE GAS INVENTORY USED?

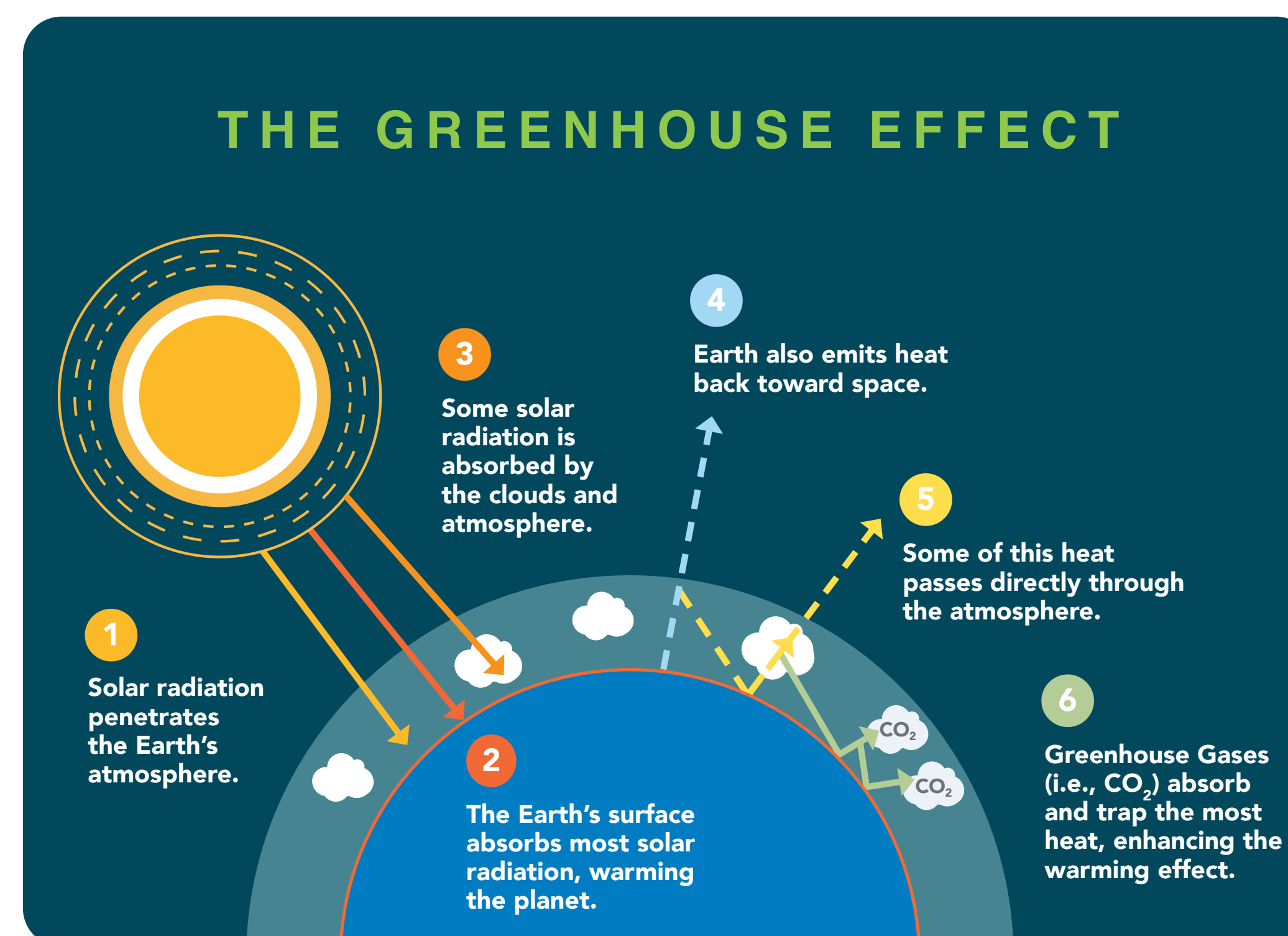
- Track emission trends over time
- Identify high-impact sectors for reduction
- Shape policies, funding, and investment decisions
- Prioritize cost-effective actions
- Communicate progress and support grant applications

It provides the foundation for data-driven sustainability decisions.

WHAT IS A GREENHOUSE GAS INVENTORY?

A GHG inventory measures how much greenhouse gas is released in a community over a year and identifies the sectors and fuels responsible (such as transportation, buildings, electricity, waste, etc.).

Wake Forest is currently collecting 2024 data to understand where emissions come from and which sectors offer the biggest opportunities for reduction.



STATE CONTEXT

North Carolina aims to cut emissions 50% by 2030 (from 2005 levels) and reach net-zero by 2050

Statewide emissions have already fallen 38% since 2005



Quick Facts Image Source: <https://edocs.deq.nc.gov/AirQuality/DocView.aspx?id=468502&dbid=0&repo=AirQuality&cr=1>







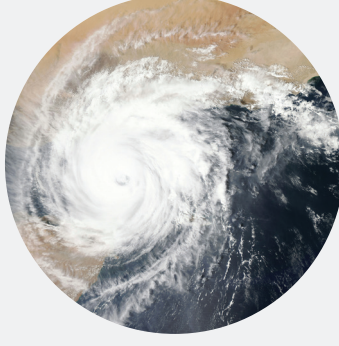




STATION 3

RISK IDENTIFICATION

CLIMATE VULNERABILITY

describes how weather and climate-related events—like extreme heat, heavy rainfall, flooding, drought, strong storms, or wildfire smoke—can affect the places, services, and systems we depend on every day. A risk becomes a vulnerability when something important is exposed to that risk and would be significantly affected by it. For example, heavier storms may threaten roads, stormwater systems, or low-lying neighborhoods; extreme heat can strain our power grid and impact outdoor workers; drought can affect water supply and tree health; and high-wind events can damage buildings or critical facilities. Understanding vulnerability means looking at what hazards Wake Forest may face, how likely they are, how big the impacts could be, and which assets—like bridges, parks, utilities, Town buildings, or homes—are most at risk. This helps us prioritize actions that reduce harm, strengthen our infrastructure, and keep our community safe and resilient now and in the future.

RISK	EXPLANATION	CHOOSE YOUR 3 HIGHEST CONCERNS
 EXTREME HEAT	Periods of unusually high temperatures	
 EXTREME COLD	Episodes of very low temperatures	
 DROUGHT	Extended periods of below-normal rainfall that reduce water supplies, dry out soils, and increase wildfire risk	
 HEAVY PRECIPITATION & THUNDERSTORMS	Intense rain events and severe storms (hail, tornadoes, strong winds) that can damage property, disrupt power, and cause flooding	
 HEAVY SNOW AND ICE	Winter storms with significant snow or ice that can impair travel, damage trees and power lines, and disrupt essential services	
 WILDFIRE	Uncontrolled fires fueled by dry conditions and vegetation that threaten homes, forests, and air quality, especially in areas where development meets woodland	
 HURRICANES	Powerful storms with strong winds and heavy rain that can cause widespread flooding, wind damage, and infrastructure impacts across the state	
 FLOODING	Overflow of water onto normally dry land caused by heavy rainfall or storms, impacting homes, roads, waterways, and ecosystems	
 ECOSYSTEM HEALTH & HABITAT LOSS	Damage to forests, wetlands, and wildlife areas that reduces biodiversity and weakens natural protections against storms and flooding	





STATION 4

CLIMATE

VULNERABILITY

INSTRUCTIONS

- Place a black pin where you live
- Indicate areas of concern with clear pin





STATION 5 VISION

**WHAT DOES A SUSTAINABLE
WAKE FOREST LOOK LIKE?**

**PLEASE USE A STICKY NOTE AND WRITE YOUR
THOUGHTS IN NO MORE THAN FIVE WORDS**









STATION 6

STRATEGY FRAMEWORK

PLEASE USE 8 STICKERS TO SELECT YOUR 2 HIGHEST PRIORITY ACTION AREAS FOR EACH STRATEGY PILLAR

 <div>BUILT ENVIRONMENT & ENERGY</div>	Electrification	Renewable Energy	Energy Efficiency	Building Materials	Building Reuse
 <div>TRANSPORTATION & MOBILITY</div>	Walkability	Bikeability	Transit	EVs - Personal/Fleet	Other VMT (vehicle miles traveled) Reduction
 <div>RESOURCE CONSERVATION</div>	Recycling	Compost	Trash Reduction	Water Efficiency	Sustainable Procurement
 <div>HEALTHY & RESILIENT COMMUNITY</div>	Green Stormwater Infrastructure	Resiliency & Adaptation	Native Plants	Tree Canopy	Local Food

DO YOU HAVE OTHER IDEAS? [POST THEM HERE!](#)





STATION 7

WHAT YOU CAN DO



The **SUSTAINABILITY PLAN** depends not only on Town government but also on active participation from residents, business owners, and community organizations. You can support the plan by participating in the forthcoming community survey, paying attention to new programs, giving feedback when drafts and policies are shared, advocating for sustainable practices in your neighborhood or local HOA, and encouraging your workplace or school to adopt greener habits. Every voice adds weight when it comes to securing funding, pushing for policy changes, or simply helping sustainable norms become part of everyday life in Wake Forest.

WHAT ARE YOU ALREADY DOING TO IMPROVE SUSTAINABILITY?

WHAT ARE YOU CURIOUS TO LEARN MORE ABOUT?

FILL IN THE SPACE BELOW WITH STICKY NOTES

Here are concrete actions residents and local businesses can adopt to support a sustainable community. These steps are designed to be accessible, meaningful, and to help you see results in your own home or business:

→ **MINIMIZE WASTE**

Reduce, reuse, compost, and recycle. Use reusable containers, avoid single-use plastics, and participate in food scrap and composting programs

→ **ELECTRIFY**

Convert home cooking and heating appliances, as well as your vehicle, to electric alternatives when replacements are due

→ **SAVE ENERGY**

Improve insulation, seal air leaks, replace inefficient lighting, and perform energy audits

→ **GO RENEWABLE**

Explore rooftop solar or purchasing renewable energy through your utility

→ **RETHINK TRANSPORTATION**

Walk, bike, carpool, or use public transit when possible; support completion of local trail systems for safer active transportation

→ **GO NATIVE AND GREEN**

Reduce turf grass; plant native species and pollinator-friendly gardens; support wildlife habitat in your yard or community spaces





STATION 8 GENERAL COMMENTS

