

SUSTAINING SUCCESS

Envisioning Knoxville's Future
Sustainability Leadership

80%

x 2050

reduction in
eCO₂

50%

x 2030

reduction in
eCO₂

20%

x 2020

reduction in
eCO₂



CITY OF KNOXVILLE
MADELINE ROGERO, MAYOR

Building Sustainable Leadership

For over a decade, the City of Knoxville has worked to make Knoxville a greener, more sustainable city – one where the economy, environment, and community can thrive today and in the future. Thanks to our forward-looking, pragmatic, and effective approach, Knoxville is a **regional and national sustainability leader**. We’ve saved money through efficient City operations, improved infrastructure for folks who bike, walk, or use public transit, increased renewable energy capacity, and invested in energy efficiency for our homes and

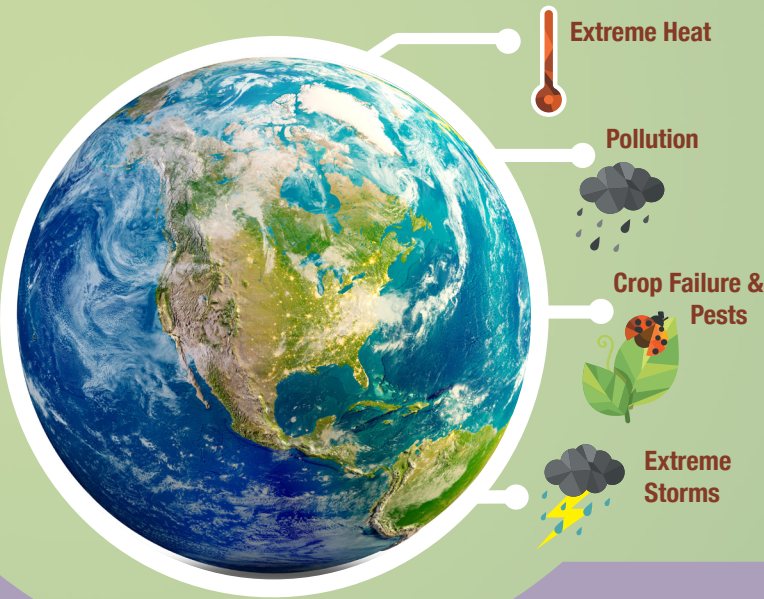
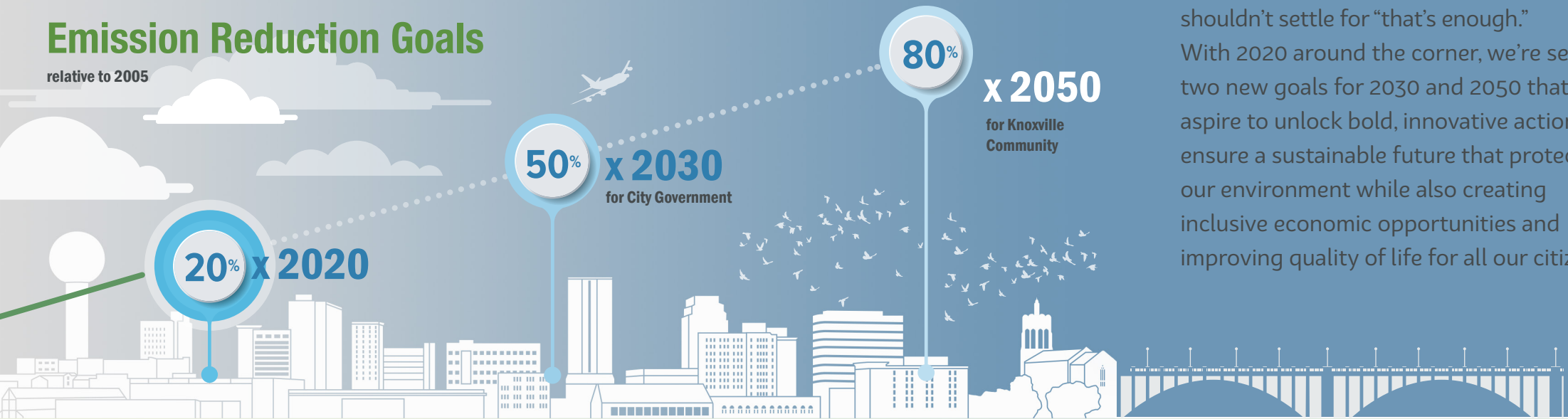
businesses. Jobs in energy and advanced technology sectors are strengthening our region’s economy. We’ve shown that when we advance sustainability, we make Knoxville an even greater city.

Our Progress

In 2008, the City of Knoxville set a goal to reduce greenhouse gas emissions **20% by 2020** relative to 2005 levels for both municipal operations and the Knoxville community. **We’re on track to exceed our municipal goal**, and community emissions are lower in the midst of a growing economy and improving quality of life for our residents.

Emission Reduction Goals

relative to 2005



Being a Sustainable Community Means Addressing Climate Change

Climate change is intensifying many challenges we already face in Knoxville, like extreme heat, extreme storms, localized flooding, air pollution, and pests to people and crops. It threatens our property, our wallets, our health, and places we love, like the Great Smoky Mountains National Park. Across the world, millions of lives are at risk. **Experts agree: this big challenge calls for bold leadership** to protect our children and grandchildren from the worst effects of climate change and prepare local communities to deal with impacts they already face.

The High Cost of Increased Flooding

Flooding in February 2019 caused an estimated \$43.5M in damage to Knox County homes, businesses, and public infrastructure. Climate change is expected to increase the frequency of extreme rain events in Knoxville, which would put residents at increased risk of flood damage.

Right: Flooding at the intersection of Cedar Bluff Road and Parkwest Blvd.

Photo credit: Knoxville News Sentinel



City Government Leads by Example: 50% by 2030

Emissions associated with City operations are down 15% relative to 2005, and we’re on track to exceed 20% with the completion of our LED streetlight retrofit. We’ve reduced emissions while saving taxpayer dollars and maintaining the quality services our residents expect. Our new goal is ambitious but realistic. With steady leadership, the City can make **smart, fiscally-responsible investments in new, cost-competitive technologies and operational innovations** that achieve deep emission reductions while maintaining high quality services.



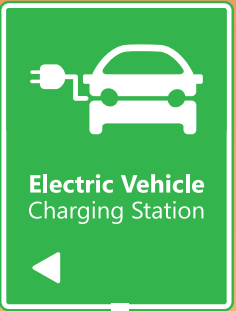
Solar panels on top of the Knoxville Convention Center

Knoxville is a leader, and leaders always move forward.

We are proud of our progress, but Knoxville shouldn’t settle for “that’s enough.” With 2020 around the corner, we’re setting two new goals for 2030 and 2050 that aspire to unlock bold, innovative action to ensure a sustainable future that protects our environment while also creating inclusive economic opportunities and improving quality of life for all our citizens.

How Might the City Achieve Our 2030 Goal?

- Aggressively phase-in electric, hybrid, and alternative-fuel City fleet and transit vehicles.
- Achieve deeper energy savings in City facilities through strategic investment in high-efficiency equipment and improved operations.
- Ratify municipal green building policy to maximize the efficiency of new City facilities.
- Invest in cost-competitive renewable energy to serve City energy needs.



Aspiring for Deep Community Progress: 80% by 2050

The Knoxville community’s greenhouse gas emissions are down 11% from 2005 levels, even while population, economic activity, and property values have increased over the last decade. We know that responsible environmental practices can go hand in-hand with economic development and an improved, more equitable quality of life. Reducing emissions 80% by 2050 is a bold aspirational goal that requires changes to technology markets and energy systems – most of which are outside City government control. **But, the City is an agent of change**, and by setting our compass toward a dramatically lower-carbon future, we aim to motivate cross-sector leadership from many partners to ensure Knoxville remains a great place for all residents to call home for generations to come.

As a Community, We’ll Need to:

- Ensure new buildings reflect modern, high-efficiency building technologies, techniques, and best practice.
- Motivate and facilitate deep energy efficiency improvements in local homes and buildings.
- Generate more electricity from renewable and low-carbon sources, and create new pathways for local residents and businesses to purchase affordable, renewable electricity.
- Improve the coverage, connectivity, and convenience of public transit, bicycle and pedestrian facilities to enhance transportation options for people who live and commute to work in Knoxville.
- Promote the strategic deployment of electric and autonomous vehicles.
- Preserve and expand Knoxville’s tree canopy.

A Growing Legacy of Leadership



Knoxville recognized as

one of 25 international finalists for a 2017 C40 Cities Bloomberg Philanthropies Award

2017

2017

Mayor Rogero named

co-chair to national Climate Mayors network



Knoxville designated

National Wildlife Federation Certified Wildlife Community (the first municipal certification in Tennessee)

City of Knoxville designated

a "Best Workplaces for Commuters"

TVA awards Knoxville

\$15 million for the Knoxville Extreme Energy Makeover Program



Knoxville awarded

Platinum Certification in TVA's "Valley Sustainable Communities" program

Mayor Rogero appointed

to White House State, Local, and Tribal Leaders Task Force on Climate Preparedness & Resilience

2014

2015

Knoxville named

one of 16 Climate Action Champions by the White House and Department of Energy



2012

2013

Knoxville wins

IBM Smarter Cities Challenge grant and launches the Smarter Cities Partnership to improve home comfort, quality, and affordability through energy efficiency



Mayor Rogero establishes Office of Sustainability

Knoxville Convention Center

becomes first convention center in the state to achieve LEED certification

2011

2012

Knoxville Sustainability

staff co-founds the Southeast Sustainability Director's Network

City releases

the first Energy & Sustainability Work Plan

2008

2010



Knoxville

selected as one of 25 DOE Solar America Cities

Mayor Haslam

appoints the City's first Energy & Sustainability Task Force

2007