



















## STAFF REPORT – FALL 2022 CLIMATE ACTION UPDATE TO COUNCIL





*This report was produced by staff from the Town’s Office of Sustainability and Resilience*









*September 28, 2022*





Buildings + Energy Actions		
Action	Benefits	Status / Target Date
1. Upgrade Library Lighting to LED	Projected savings/year: <ul style="list-style-type: none"> <li>• \$23k utilities</li> <li>• 290k kWh</li> <li>• 206 MTCO<sub>2</sub>e</li> </ul> 18-month payback Maintenance savings	✓ June 2022
2. Energy Assessment for Public Housing Units 	Franklin Energy determined that existing energy and water saving measures are efficient	✓ June 2022
3. Create Solar Fact Sheet 	Prepares Town for high-impact utility-scale solar investment opportunities 	✓ September 2022 (see staff report for more details)
4. Submit Joint Letter to Utilities Commission re: Duke Energy Carbon Plan 	Approved plan projected to achieve 70% CO <sub>2</sub> reduction from Duke Energy NC-SC power generation by 2030 	✓ August 2022 (see presentation slide for more details)
5. Scope Weatherization Gap Program 	Prepares Town to begin implementing high-impact weatherization gap program 	Scoping underway FY23, Q1




-  Council priority
-  High impact (carbon)
-  High impact (people)

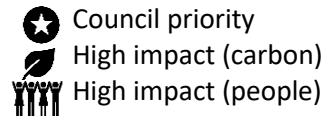
6. Upgrade Cedar Falls Turf Lighting to LED	Projected savings/year: <ul style="list-style-type: none"> <li>• \$3.8k utilities</li> <li>• \$3.9k maintenance</li> <li>• 17.6 MTCO<sub>2</sub>e</li> </ul> Project life: 25 yrs, 80k hrs	Funding secured, Parks & Rec coordinating installation  FY23, Q2
7. Conduct Energy Burden Study 	Informs other weatherization program actions (see above)  	Scoping underway  FY23, Q2
8. Update Council's Green Building Framework 	Updates green building policy for new construction (projected benefits TBD)  	Project underway  FY23, Q2
9. Participate in Year 1 of Solarize the Triangle Program	Residential and commercial rooftop solar installations (projected benefits TBD)   	<a href="#">Campaign launched</a> in August, over 600 sign-ups Triangle-wide  FY23, Q4

Transportation + Land Use		
Action	Benefits	Status / Target Date
1. Develop Public EV Station Site Suitability Map + Screening Tool 	Prepares Town for federal infrastructure funding and zoning application reviews	✓ September 2022  (click <a href="#">here</a> to view the StoryMap and tool)
2. Fleet Electrification Analysis 	Phase 1 of accelerated fleet electrification plan, with draft investment scenarios	✓ August 2022
3. Complete Solar Study for Transit Facility 	Provides cost-benefit analysis of solar, battery storage, charging optimization for Transit facility  	Finalizing analysis  FY23, Q2

<p>4. Install EV Charging Station at Eubanks Park + Ride</p> 	<p>Enables EV charging and reduces vehicle emissions 6.8 metric tons per year by displacing gasoline</p> 	<p>Vendors selected, preparing for install</p> <p>FY23, Q1</p>
<p>5. Fleet Electrification Planning</p> 	<p>Phase 2 of accelerated fleet electrification, with 5-year investment. Prepares Town for continued transition to EVs and EV infrastructure</p>	<p>Project underway</p> <p>FY23, Q4</p>
<p>6. Purchase 4-8 Electric Vehicles for Town</p>	<p>Reduces fleet emissions and provides operational insights into fleet electrification (projected benefits TBD)</p>	<p>6 orders placed, scoping 2 additional</p> <p>FY23, Q4</p>
<p>7. Host Duke Energy Charging Stations at Town facilities</p> 	<p>Enables EV charging and reduces vehicle emissions by displacing gasoline (projected benefits TBD)</p> 	<p>Evaluating options with Duke Energy</p> <p>FY23, Q2</p>
<p>8. Develop Wayfinding Strategy for Mobility Plan</p>	<p>Prepares Town for building out Mobility Plan network and enhancing use of existing transportation routes for all users</p>	<p>Reviewing draft</p> <p>FY23, Q2</p>
<p>9. Install 20 EV Charging Stations at New Rosemary Parking Deck</p> 	<p>Enables EV charging and reduces vehicle emissions by displacing gasoline (projected benefits TBD)</p> 	<p>Vendor selected, grant funds secured (\$25k), coordinating installation</p> <p>TBD</p>
<p>10. Continue Building Out Mobility Plan Network</p> 	<p>Reduces emissions by creating a town-wide transportation network that doesn't require a car</p>	<p>(See presentation slide for list of updates)</p> <p>Ongoing</p>
<p>11. Participate in TOD and LUMO Rewrite Visioning</p>	<p>Positions town with updated sustainable development and redevelopment practices (projected benefits TBD)</p>	<p>UNC intern researching model ordinances</p> <p>FY24</p>




Water, Wastewater & Natural Resources		
Action	Benefits	Status / Target Date
1. Respond to Council Petition re: Review of Town's Plan for Flood Mitigation Facilities 	Understanding of impacts from flood mitigation facilities informs Council policy on stormwater infrastructure investments	Booker Creek Working Group developing draft report/recommendations  FY23, Q2-3
2. Respond to Council Petition re: Review of Town Stormwater Regulations 	Informs Council policy on sustainable stormwater infrastructure and regulations	Staff exploring review of regulations with LUMO consultant  FY23, Q2
3. Expand Flood Alert System Sensor Technology 	Enhances early warning system for low-lying areas of Town	UNC student project complete, scoping sensor project  FY23, Q2
4. Participate in Countywide Solid Waste Master Planning 	Prepares Orange County to meet zero waste goal by 2045	Consultant selected, project underway  FY23, Q4



Resiliency		
Action	Benefits	Status / Target Date
1. Plant 200 or More Canopy Species Trees 	Increases public and environmental health, sequesters carbon (projected benefits TBD) 	Grant funding secured, coordinating with Parks & Rec to plant in fall  FY23, Q2
2. Launch Year 2 of Leave the Leaves/ Healthy Yards Campaign 	Enhanced ecosystem services, healthier soils and wildlife populations, and reduced emissions for leaf collection	Coordinating fall campaign  FY23, Q3



<p>3. Determine Who is Most Affected by Climate Stressors</p> 	<p>Prepares Town for localized programming that builds sustainability and resiliency within communities that stand to benefit the most</p> 	<p>Developing more granular GIS analysis of most impacted areas</p> <p>FY23, Q2</p>
<p>4. Launch New Interactive Climate Action Web Portal</p> 	<p>Becomes a one-stop shop for climate communication, education and engagement</p> 	<p>New Sustainability Outreach Coordinator will lead (hired)</p> <p>FY23, Q4</p>

<b>Grants Management</b>				
Grant	Grantor	Amount	Match	Status
<p>1. Install 2 EV Charging Stations at Town Hall</p> 	<p>NCDEQ, VW Settlement Program</p>	<p>\$18,000</p>	<p>\$11,968</p>	<p>✓</p> <p>Installed: October 2021</p> <p>Reporting: thru 2025</p>
<p>2. Upgrade Library Lighting to LED</p> 	<p>Duke Energy Small Business Energy Saver Program (utility incentive)</p>	<p>\$67,114</p>	<p>\$34,855</p>	<p>✓</p> <p>Installed: June 2022</p> <p>Reporting: NA</p>
<p>3. Fleet Electrification Planning Internship</p> 	<p>Environmental Defense Fund Climate Corps Fellow</p>	<p>\$11,250</p>	<p>N/A</p>	<p>✓</p> <p>Completed: August 2022</p>
<p>4. Upgrade Cedar Falls Turf Lighting to LED</p>	<p>Orange County Community Climate Action Grant Program</p>	<p>\$128,057</p>	<p>\$91,943</p>	<p>Active</p>

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5. Install EV Charging Station at Eubanks Park + Ride 	Orange County Community Climate Action Grant Program	\$18,500	TBD	Active
6. Plant 200 or More Canopy Species Trees 	Orange County Community Climate Action Grant Program	\$40,000	N/A	Active
7. Install 10 EV Charging Stations at the Rosemary Parking Deck	NCDEQ, VW Settlement Program	\$25,000	TBD	Awarded
		\$307,921	\$138,766	