

MEMORANDUM

Date: January 13, 2026

To: Jessica Hoffman, Budget & Performance Management Director

From: Don Reeves, Sustainability Program Coordinator

RE: Sustainability Action Plan FY26 Update



The purpose of this memo is to provide an update on the progress of the *Town of Apex Sustainability Action Plan (SAP)*. This document outlines achievements to date, highlights ongoing and scheduled projects, and summarizes departmental actions advancing the Town's commitment to sustainability, resilience, and environmental stewardship. The updates reflect interdepartmental collaboration and progress made since the plan's FY25 release, focusing on energy efficiency, clean mobility, and waste reduction across Town operations.

Key Highlights

The first year of Sustainability Action Plan implementation focused on establishing the foundational elements necessary to support meaningful progress. Key groundwork was completed in facilities and energy management, fleet electrification and clean mobility, waste management, and environmental impact reduction.

Facilities and Energy Management

The Town continues to focus on facility energy efficiency and renewable energy generation. Installation of the expanded solar panel project began at prioritized Town facilities, with the goal of increasing clean energy generation and reducing long-term utility costs. The energy management software, Enpira, was developed and implemented to provide empirical analysis of historical data, enabling staff to track consumption across various Town facilities and identify energy inefficiencies. This information will inform future energy-saving strategies and design plans. Staff have begun meeting to discuss methods for water conservation within Town landscaping and to develop a Strategic Energy Plan that will help reinforce energy efficiency standards across all Facility development.

Fleet Electrification and Clean Mobility

Fleet modernization remains a priority, supported by the telematics data provided by GeoTab. Telematics continue to inform idle reduction, rightsizing, and EV charging site decisions. EV infrastructure planning, and strategic replacement analyses have been completed with recommendations of which physical areas and departments to convert first. An EV Infrastructure capital improvement plan proposal has been submitted to provide departments at specific locations with the infrastructure needed to charge new EV and hybrid vehicles during off hours.

Waste Management and Environmental Impact

The Town has reached its first full year utilizing the new recycling infrastructure and signage funded through a North Carolina Department of Environmental Quality (NC DEQ) grant. The \$22,500 grant enabled the purchase of 361 new recycling bins that replaced worn out bins or provided new bins to match a waste bin in Town facilities and at Town events. The grant also enabled staff to begin tracking volume of diverted waste. In addition, it provided an opportunity to introduce paper reduction initiatives that departments can continue independently, with emphasis on digital documentation and reduced printing.

The Town is evaluating improved yardwaste management processes under the direction of the new Solid Waste Manager. Town staff are exploring composting feasibility in facilities to advance waste diversion goals, as well as beginning discussion on the feasibility of community drop-off sites at yet to be determined Town sites.

Other Initiatives

Sustainability staff have developed a [Project Tracking Dashboard](#) to display on the Town's website to provide transparency and display measurable progress that Apex has made towards the SAP. The Dashboard will be updated regularly when a project status changes, and new projects will be added as they begin. Staff are also working on providing additional dashboards that will display more statistical information regarding the SAP initiatives relating to waste diversion, energy usage, and carbon emissions.

Initiative Implementation Status

Initiatives have been organized into three categories: Completed, In Process, and Scheduled. Completed initiatives are those that have been accomplished; however, some may continue on an ongoing basis. In these cases, the necessary guidelines or frameworks have been established, allowing future efforts to proceed in alignment with those standards. In Process initiatives are currently underway, with work initiated and advancing toward completion. Scheduled initiatives are planned for future implementation. Many of these initiatives are dependent on the completion of prerequisite projects before they can begin.

Completed Initiatives

Solar Energy Assessment – Optima Engineering completed a comprehensive solar feasibility assessment of 40 Town facilities in 2024. Eleven sites were identified as “excellent” candidates for phased solar PV installations. Monthly solar generation tracking now occurs through Fronius and SolarEdge software, with performance data integrated into Enpira's energy management platform.

LED Street and Outdoor Lighting – The Electric Department completed a phased capital improvement project to convert Town-owned streetlights to LEDs. This initiative is intended to

significantly reduce energy consumption and maintenance needs while improving illumination and safety. The project remains ongoing as remaining legacy fixtures reach end-of-life.

Telematic Fleet Technology – Fleet-wide installation of GeoTab tracking devices is complete, enabling real-time vehicle tracking, diagnostics, and fuel consumption data through telematics software. The data informs replacement schedules, route efficiency, and idling levels.

Vehicle Evaluation Criteria and Replacement Analysis – Fleet Services finalized a new evaluation matrix and lifecycle analysis tool utilizing telematic data to guide annual replacement decisions. These tools ensure transparent, data-driven replacement based on usage, maintenance cost, and emissions metrics.

EV Charging Infrastructure Location Study – A study utilizing data from BlueArrow Telematics and GeoTab analyzed fleet telemetry to identify optimal future charging sites. Recommended locations align with fleet dwell times, operational coverage needs, and departments best suited for EV conversion. Implementation will coincide with fleet electrification phases.

Electric and Alternative Fuel Equipment – The Parks, Recreation, and Cultural Resources (PRCR) Department utilizes electric mowers, blowers, and maintenance equipment, demonstrating reduced fuel costs and noise impacts.

Public Transit Options – GoApex Route 1 continues to provide reliable and affordable public transportation and future plans include additional routes, such as the proposed “Route 2.” The bus provides sustainable transit infrastructure, supporting equitable and low-emission mobility access.

Recycling Standards & Signage – Standardized recycling signage has been developed in partnership with NC DEQ and placement of approved signage has been deployed with accompanying bins. Signage is intended to educate and encourage staff to minimize contamination of recycling bins and increase waste diversion at Town facilities into the appropriate waste streams. Staff training is continuous to promote consistency and accountability across departments.

Initiatives in Process

High Efficiency Inventory Replacement – Sustainability and Facility Services staff have begun phased replacement of HVAC systems, lighting, and appliances with energy-efficient alternatives. An upcoming energy audit and lifecycle cost analysis will provide more comprehensive data to further inform and refine these efforts moving forward.

Water Conservation Landscape Design – Facility Services, PRCR, and Sustainability staff are working to implement native plantings and “no-water” landscaping zones to reduce irrigation and enhance biodiversity. Discussions and site planning are ongoing with the intention of using space

on Town Campus as a potential pilot space. Specifications for future designs are being developed for inclusion in Town facility standards.

Greenhouse Gas (GHG) Inventory – Sustainability staff, in collaboration with ICLEI – Local Governments for Sustainability (originally International Council for Local Environmental Initiatives), is conducting a GHG Inventory of Town owned property utilizing ICLEI’s ClearPath Platform. The study measures emissions from Town operations, fleet fuel use, waste, and energy consumption. The inventory will coordinate with strategies to maximize energy efficiency in the future Strategic Energy Plan, as well as recognizing strategies to reduce or minimize emissions from the Town.

Strategic Energy Plan – Facility Services and Sustainability staff are meeting to lay foundational work on the Strategic Energy Plan. Once the results of the GHG inventory are available, Sustainability staff will integrate findings into a long-term energy strategy aligning with the Town’s 100% Clean Energy Resolution. The plan will seek to prioritize low-cost, high efficiency options while also suggesting facility retrofits and renewable energy investments, where feasible.

Vehicle Idling Reduction Guidelines – Telematics data is being continuously analyzed to establish measurable idle thresholds for drivers and inform measures for departmental accountability. Guidelines have been developed that will address operational needs while targeting reductions in emissions and fuel waste. Guidelines await further review, approval, and adoption.

EV & Hybrid Vehicle Procurement Guidelines – Standardized procurement procedures are being drafted to ensure consistent EV and hybrid acquisitions, aligned with right-sizing fleet and funding opportunities. This will enable streamlined fleet integration and budget forecasting.

Paper Waste Reduction – Departments are transitioning paper-heavy workflows to electronic platforms, such as utilizing digital systems for Travel & Training forms and P-card receipts. Departments are continuously innovating methods to further reduction efforts.

Yardwaste Collection Assessment – Solid Waste Services is assessing collection efficiency, stormwater impacts, and long-term composting feasibility. Route optimization and potential in-house processing will reduce emissions and hauling costs. Staff from Environmental Programs, Sustainability, Solid Waste Services, and Water Resources are exploring potential community campaigns to educate residents on best practices for disposing or moving yardwaste (i.e. “Leave the Leaves” educational campaigns)

Scheduled Initiatives

Energy Efficiency Standards in Town Facilities – Sustainability and Facility Services staff will utilize the Strategic Energy Plan to ensure energy efficiency standards in new buildings and evaluate low-cost, long-term performance of major appliance and systems inventory. Town Staff

are also finalizing “solar-ready” design standards for new and renovated facilities to ensure new buildings will be capable of installing solar panels from the start.

EV & Hybrid Vehicle Maintenance Training – Fleet Services and Risk Management will be developing training for technicians on EV safety, diagnostics, and maintenance procedures. Training will extend to operational staff for EV use and charging awareness.

Centralized Fleet Program – A proposed charge-back fleet management system would consolidate vehicle ownership under Fleet Services to improve asset utilization, standardize procurement procedures, and enable accurate cost recovery across departments.

Sustainable Procurement & Purchasing Policy – Finance, Budget, and Sustainability staff will develop a Sustainable Procurement & Purchasing Policy that integrates environmental, social, and economic considerations into purchasing decisions. The policy will prioritize life-cycle value, reduce environmental impact, and support local, equitable suppliers while aligning procurement with the Town’s fiscal efficiency and sustainability goals.

Town & Facility Composting Assessment – Building on the success of the revitalized internal recycling program, Solid Waste Services and Sustainability staff will evaluate the feasibility of composting programs at high-traffic facilities to increase diversion rates and meet waste reduction targets. Special events staff are currently working to provide composting availability at many of the events held to promote the benefits and accessibility of composting.

Summary

The Town of Apex continues to make measurable progress toward its sustainability goals, implementing data-driven practices that balance environmental stewardship with fiscal responsibility. As foundational inventories and analyses are developed, future updates will include quantified results on emissions, energy savings, and waste diversion. The ongoing collaboration among departments ensures continued alignment with Council priorities.

Initiative Status Table

Action Area	Project / Initiative	Phase	Stage	Notes / Dependencies
Facilities & Energy	Solar Energy Assessment	Completed	Finished	Informs energy efficiency standards and energy plan
	LED Street and Outdoor Lighting	Completed	Ongoing	
	High Efficiency Inventory Replacement	In Process	Ongoing	
	Water Conservation Landscape Design	In Process	Ongoing	
	Greenhouse Gas Inventory	In Process	Ongoing	Foundational for Strategic Energy Plan
	Strategic Energy Plan	In Process	Ongoing	
	Energy Efficiency Standards	Scheduled	-	Requires GHG and Life-cycle cost analysis completion
Clean Mobility	Telematic Fleet Technology	Completed	Ongoing	
	Vehicle Evaluation Criteria & Replacement Analysis	Completed	Finished	Guides Centralized Fleet Program
	EV Charging Infrastructure Location Study	Completed	Finished	Supports fleet electrification
	Electric & Alternative Fuel Equipment	Completed	Ongoing	
	Public Transit Options	Completed	Ongoing	
	Vehicle Idling Reduction Guidelines	In Process	Ongoing	Dependent on Telematic data
	EV & Hybrid Procurement Guidelines	In Process	Ongoing	
	EV & Hybrid Vehicle Maintenance Training	Scheduled	-	
Centralized Fleet Program	Scheduled	-	Dependent on Vehicle Evaluation Criteria & Analysis	
Environmental Impact & Waste	Recycling Standards & Signage	Completed	Finished	
	Paper Waste Reduction	In Process	Ongoing	
	Yardwaste Collection Assessment	In Process	Ongoing	
	Sustainable Procurement & Purchasing Policy	Scheduled	-	Supports waste reduction and purchasing reform
	Town & Facility Composting Assessment	Scheduled	-	Dependent on recycling data