

# Green Fleet Policy

City of Sedona, AZ



Last updated November 10, 2021

## Overview

The Green Fleet Policy acts as guidance for the City of Sedona, Arizona (“City”) to reduce the greenhouse gas emissions from City fleet vehicles. The contents of this plan are aimed to specifically target passenger vehicles, defined as those vehicles which serve a primary purpose of transporting small quantities of people and items. Although outside the purview of this plan, the City will make efforts to electrify other equipment, such as leaf blowers and lawn mowers, as possible. Electrification will be the primary method for reducing fleet emissions.

The Green Fleet Policy consists of the following ten sections that comprehensively outline how the City will measure, track, and reduce passenger vehicle fleet emissions.

1. Definitions
2. Goals and Objectives
3. Background
4. Annual Metrics
5. Vehicle Selection Standards
6. Replacement Timeline
7. Charging Infrastructure
8. At Home Charging
9. Fuel Reduction Initiatives
10. Proper Odometer Reporting

## 1. Definitions

The following terms referenced in this document are defined as follows:

- **Fleet vehicle:** Any vehicle owned by the City which is used by City employees and officials. Fleet vehicles do not encompass any privately-owned vehicle, such as those used for commuting purposes.
- **Passenger Vehicle:** Any vehicle which serves a primary purpose of transporting small quantities of people and items. Passenger vehicles do not include heavy-duty machinery, trailers, cranes, or buses.
- **Internal Combustion Engine (ICE) Vehicle:** A vehicle that runs entirely on gasoline or diesel fuel.
- **Plug-In Hybrid Vehicle (PHEV):** A vehicle that primarily runs on gasoline or diesel fuel, but also can run for short distances on a small battery which can be charged with electricity.
- **Battery Electric Vehicle (BEV):** A vehicle that runs exclusively on electricity and contains a large battery which must be charged.
- **Electric Vehicle Supply Equipment (EVSE):** Equipment used to charge BEV and PHEV vehicles.

- **Zero Emissions Vehicle (ZEV):** A class of vehicle that does not emit exhaust gas or other pollutants from the onboard source of power. ZEVs include BEVs, fuel cell hydrogen vehicles, bikes, electric bikes and scooters, amongst other options that may be developed in the future.

## 2. Goals and Objectives

This Green Fleet Policy is created as a directive of the 2020 Municipal Sustainability Plan action 5.1.2: “Develop a Green Fleet Policy.”

The Climate Action Plan, adopted by City Council in July 2021, sets a broad goal of reducing community-wide emissions by 50% by 2030. This includes the following goal for City fleet electrification:

“By 2030, the City strives to transition all passenger vehicles in the City fleet to 100% zero emissions vehicles.”

Given that electrification provides the most environmental and economic benefits when replacing a vehicle already up for replacement, the City is starting to electrify its fleet well ahead of 2030.

## 3. Background

In calendar year 2018 (CY18), the City’s vehicle fleet emitted an estimated 357 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>). In that year, the vehicle fleet accounted for around 12.7% of the City’s entire emissions. This made it the second most carbon-intense sector, only trailing the water and wastewater treatment facilities sector. As such, reducing fleet emissions will be a critical part of reducing the City’s overall emissions. A predominately zero-emissions fleet also allows the City to lead by example and demonstrate to the community that reducing vehicle emissions in Sedona is a priority.

## 4. Annual Metrics

The following metrics will be collected each calendar year to better understand the City’s progress towards meeting Green Fleet Policy goals. Data collection and processing will be executed by the City’s Sustainability Program, with assistance from the City’s Finance Department and third-party vendors as needed.

1. Number of vehicles in fleet including:
  - a) Vehicle type (sedan/crossover, SUV, light duty pickup truck, other)
  - b) Fuel type (ICE, ICE hybrid, PHEV, BEV, other)
2. Miles driven
3. Quantity of fuel consumed by type
4. Cost of fuel consumed by type
5. Greenhouse Gas Emissions (GHGs)
6. Portion of City emissions derived from fleet vehicles
7. Non-GHG EPA criteria emissions (carbon monoxide [CO], nitrous oxides [NO<sub>x</sub>], particulate matter [PM<sub>2.5</sub>])

## 5. Vehicle Selection Standards

Starting in Fiscal Year 2023 (“FY23”), all new passenger vehicle purchases will follow the below selection standards:

1. The vehicle up for replacement will be replaced with a zero emissions vehicle (ZEV) if a suitable ZEV model exists and is available.
2. If a suitable ZEV replacement does not exist or is not available, then the vehicle may be swapped with another fleet vehicle, where possible.
  - a) For example: ‘Vehicle A’ and ‘Vehicle B’ are both trucks. ‘Vehicle A’ is up for replacement in FY23, while ‘Vehicle B’ is not up for replacement until FY25. If no ZEV truck models are available in FY23, and ‘Vehicle A’ must be a truck, but ‘Vehicle B’ could reasonably be downsized to an SUV, vehicle swapping could occur. ‘Vehicle A’ would be replaced by ‘Vehicle B,’ and ‘Vehicle B’ would be replaced with a new suitable ZEV.
3. Only where the above is not possible will non-ZEV purchases be allowed. For non-ZEV purchases, lower-emission options such as plug-in hybrid electric vehicles (PHEV) will be prioritized. Approval from the City’s Sustainability Program or the City Manager must be received prior to purchasing a non-ZEV.
4. Where possible, ZEVs will be prioritized for those drivers with the largest current emissions. This could include internal fleet swapping amongst vehicles that are not up for replacement.
5. In limited numbers, City-wide pool vehicles may be replaced with PHEVs. This exception exists to accommodate the need to travel long distances while comprehensive charging infrastructure does not yet exist in the region.

## 6. Replacement Timeline

Each year, prior to budgeting season, the Sustainability Program will have conversations with all department heads and the Finance Department to understand which vehicles will be replaced during the following fiscal year. If the selected replacement vehicle is not already a ZEV, the Sustainability Program will recommend alternatives, including vehicle swapping. The full needs and usage of the vehicle will be considered. In some cases, this could also include conversations with the individual driver(s) assigned to the vehicle being replaced.

To advance and streamline this process, the Sustainability Program will create or outsource the creation of a preliminary timeline for ZEV adoption. This timeline will be based on an analysis of the current City fleet, market trends, and vehicle availability. The timeline will address each fleet vehicle, when it will be replaced, and what suitable ZEV models exist for procurement. Due to the rapidly evolving nature of the ZEV market, and the constantly changing needs of the City fleet, this timeline will only act as a recommendation.

## 7. Charging Infrastructure

Expanded electric vehicle supply equipment (EVSE) infrastructure will also be needed to electrify the City fleet. As such, the City will strategically establish a comprehensive EV charging network. While publicly available charging will be an important part of the Sedona community’s electrified future, the City will also need designated chargers available only for City fleet vehicles.

The following locations have been identified as needing additional fleet EVSE over the next 1-2 years.

- The Police Department garage at 100 Roadrunner Drive
- The City parking lot at 55 Sinagua Drive
- The Sedona wastewater treatment facility at 7500 West State Route 89A
- The City maintenance yard at 2070 Contractor's Road

The following locations have been identified as potentially needing additional fleet EVSE over the next 3-5 years.

- The City-leased property at 221 Brewer Road
- At Posse Grounds Park, near 525 Posse Ground Road
- In Uptown Sedona, to meet the needs of the Sedona's Police Department's Uptown Substation
- The proposed parking garage at 430 and 460 Forest Road
- The proposed transit operations and maintenance facility, and the transit mobility hub, once completed

Additional EVSE locations will be identified as needed.

## 8. At Home Charging

Some City employees are approved to take their assigned fleet vehicles home with them overnight. Where this is the case, those employees will receive a small "charging allowance" to cover the costs of overnight vehicle charging. The charging allowance will be financially structured in the same manner as current phone and car allowances. As such, the charging allowance must be approved by the department head and the City Manager. The size of the allowance will be determined based on employee location, ability to charge at work, and cost of electricity, amongst other factors.

## 9. Fuel Reduction Initiatives

The best way to reduce GHG emissions is to reduce fuel use overall. The City will support this in several ways:

- **Optimize vehicle selection.** Staff will select appropriately sized vehicles for procurement to improve fuel efficiency and reduce emissions.
- **Anti-idling policy.** The City will prohibit non-essential idling of fleet vehicles. Essential idling includes emergency vehicles, safety vehicles, and conditions where idling is needed for driver safety, such as extreme heat.
- **Smart-driving habits.** Staff should be informed of the following practices, which reduce emissions and accidents through vehicle operation. Smart-driving habits include:
  - Accelerating and decelerating smoothly.
  - Gently decelerating when entering corners and braking.
  - Observing posted speed limits.
  - Always wearing a seatbelt.
  - Never driving while distracted by a cell phone or other device.
- **Regular Vehicle Maintenance.** Fleet vehicle efficiency should be maximized through proper tire inflation, timely maintenance, and annual emission systems inspections.

## 10. Proper Odometer Reporting

In order to more accurately account for fleet metrics such as miles driven and emissions:

- All drivers of City fleet vehicles will input the correct odometer reading of their vehicle at the point of sale for gasoline and diesel purchases.
- When purchasing equipment fuel on a vehicle fuel card, staff should input an odometer reading of '99999' to communicate that the fuel purchased was not for the vehicle associated with the purchasing card.

### Approval

By: Karen Osburn

Title: City Manager

Signed: 

Date: 11/18/21