



Proposed Target Carbon Sectors and Measures

The following target sectors form the foundation of the Preliminary Climate Action Plan (CAP). The County selected each sector based on the following: potential to reduce climate change, co-benefits, available grant opportunities or funding, alignment with the County's Capital Improvement Program (CIP), and jurisdictional authority. We will refine and potentially adjust these sectors after gathering public input and completing the County's greenhouse gas (GHG) inventory.



Energy

The County owns over 800 buildings and many other assets, including parks, an airport, and a harbor. These assets contribute to GHG emissions. The County has chosen this sector because it has the authority to implement energy efficiency upgrades to its new and existing structures. This sector offers the co-benefits of improved indoor air quality to its staff, utility cost savings, criteria pollutant reductions and outreach opportunities to assist our communities.

- Pursue building decarbonization throughout County-owned facilities
- Improve efficiency of County-owned cogeneration facilities
- Pursue solar installation in County-owned facilities
- Promote building decarbonization throughout the community



Mobility

The County's fleet is extensive and includes thousands of passenger vehicles, buses, vans, medium- and heavy-duty trucks, on- and off-road construction equipment, airport ground support equipment (GSE), and marine craft. This sector aims for fleet conversion and offers co-benefits such as reduced traffic congestion, improved health from decreased exposure to pollutants, and cost-savings from reduced fossil fuel dependence. The County has identified many projects that align with its CIP.

- Pursue decarbonization of County-owned fleet
- Pursue decarbonization of County goods movement equipment
- Expand County-owned and publicly accessible Electric Vehicle (EV) charging infrastructure
- Decrease the tourism related GHG emissions in Orange County
- Reduce VMT for County employees and County-owned fleet
- Reduce VMT in Unincorporated Areas
- Optimize traffic flow to reduce idle time in unincorporated areas



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Resource Recovery and Waste

The County operates three active landfills and maintains and monitors 20 closed facilities. Landfills are widely considered to be the third-largest contributor of GHGs and related criteria pollutants. The County is studying new landfill gas collection technology and expanding recycling and organic waste management strategies. Co-benefits include the reduction of criteria pollutants, revenue to the County from converting additional landfill gas to energy, and a reduction of bulk items to the landfills. The County has identified projects that align with its CIP as well.

- Expand infrastructure and increase public participation in County waste diversion programs
- Explore opportunities to increase or expand existing regional composting facilities
- Increase waste-to-energy conversion technology at County landfills
- Expand the County's repurposing efforts to reduce bulk items being disposed of at landfilled



Environmental Justice

Recognizing the need to prioritize vulnerable communities, the County has made Environmental Justice its own sector. Climate change disproportionately affects communities of color in lower-income areas, causing poor air quality, extreme heat, and infrastructure degradation. Co-benefits also include reduction in health risks, reduced heat island effect, improved indoor air quality, jobs growth and other economic benefits.

- Expand access to open space for communities lacking recreational amenities or tree coverage
- Promote and expand active transportation networks to essential destinations in vulnerable communities
- Promote building retrofits located in vulnerable communities
- Incentivize transit-oriented development (TOD) for permanent supportive, affordable, and workforce housing
- Expand and promote workforce development in green industries



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Natural Resources

Orange County aims to preserve its natural resources and ecosystems while promoting water conservation and best management practices. Goals include increasing access to alternative water sources, setting Countywide water conservation targets and implementing stormwater retrofits. Co-benefits include healthier ecosystems, public health improvements, and economic stability.

- Improve water supply reliability and efficiency
- Protect and enhance surface and beach water quality
- Integrate flood management with other water management practices
- Restore and protect ecosystems, native habitats and natural resources



Resilience

The County must anticipate, prepare for and respond to climate-related hazardous events, trends and disturbances. By reducing GHG emissions, the County contributes to global climate efforts and prepares for impacts such as severe wildfires, heatwaves, droughts, disease spread, and rising sea levels that threaten its coastal communities. Ongoing resilience efforts include incorporating climate adaptation into the Local Hazard Mitigation Plan. The CAP will support and build upon these efforts to ensure public health, safety and well-being of our residents and their homes.

- Support the implementation of the South Orange County Regional Coastal Resilience Strategic Plan and related efforts
- Improve response to hazard events
- Improve response to disaster health orders

