



# 6 – COUNTY GOVERNMENT OPERATIONS ENERGY AND GREENHOUSE GAS REDUCTIONS



## COUNTY OPERATIONS REDUCTION MEASURE SUMMARY

### Reduction Measure Topic Areas and Goals

The Conservation and Open Space Element (COSE) of the General Plan directs a 15% reduction (from 2006 levels) in greenhouse gas emissions from County operations by 2020. In order to achieve that target, the County will need to implement the reduction measures presented in this chapter. The reduction measures are organized by topic area and goal consistent with the sources of greenhouse gas (GHG) emissions from County operations as presented in the GHG Inventory (**Chapter 3**). Reduction measure topics areas include:

- Energy efficiency & conservation
- Renewable energy
- Waste reduction
- Vehicle fleet
- Employee commute
- Water conservation

Each topic area includes a goal, a set of reduction measures, and supporting actions for each measure to demonstrate how the goals will be achieved.

Implementation of the GHG reduction measures presented in this chapter will achieve the County's GHG emissions reduction target as well as the following County goals directed by the COSE.

- Energy Efficiency & Conservation: Reduce energy use in existing County facilities 20% by 2020.
- Renewable Energy: Increase the use of renewable energy sources in County facilities to account for 10% of total energy used.



The EnergyWise Plan puts the County in a leadership position to reduce GHG emissions and to become more energy efficient.



Employee commuting is 46% of all GHG emissions associated with County operations.

- **Waste Reduction:** Reduce the amount of waste generated at County facilities and increase the County’s waste diversion rate to 80% by 2020.
- **Vehicle Fleet:** Reduce emissions from the County’s vehicle fleet by using alternative fuels and decreasing vehicle miles traveled.
- **Employee Commute:** Provide additional opportunities for employees to utilize alternative transportation options and reduce commute lengths.
- **Water Conservation:** Reduce water use in County facilities 20% by 2020.

**Reduction Measure Organization**

***Policy and Supporting Actions***

Each reduction measure includes the measure language, supporting actions, and a description of what the program will include. Many of the reduction measures will assist in the implementation of the Conservation and Open Space Element policies. The COSE policies that will be implemented through the Plan are listed with each measure.

***Implementation***

An implementation table is provided for each GHG reduction measure, which identifies the County agency that will be responsible for the implementation of the measure, the time frame for implementation, ranges of the costs and savings that will be associated with the measure, and the indicators that will be used to measure progress. The time frame and costs/savings ranges used throughout this chapter are provided below.

| Time Frame |            |
|------------|------------|
| Ongoing    | Continual  |
| Immediate  | 0–1 Year   |
| Near-Term  | 1–5 Years  |
| Mid-Term   | 5–10 Years |
| Long-Term  | 10+ Years  |

| Costs/Savings |                     |
|---------------|---------------------|
| Minimal       | 0                   |
| Low           | \$1–\$25,000        |
| Low-Mid       | \$25–\$100,000      |
| Medium        | \$100,000–\$200,000 |
| Medium-High   | \$200,000–\$500,000 |
| High          | Over \$500,000      |



***GHG Emissions Reduction***

When sufficient information is available, emissions reduction measures have been quantified to indicate the contribution that a measure will have to overall GHG reductions. This number is presented in MTCO<sub>2</sub>e reduced per year. In some cases, the GHG reduction benefit is not quantifiable on its own but is included in another strategy. Other measures may not have a direct GHG reduction benefit but are critical to the success of other GHG reduction strategies.

***Co-Benefits***

In addition to reducing GHG emissions, many measures will provide numerous co-benefits to the community while furthering the sustainability goals of the County. These co-benefits are depicted in this document by graphic symbols as presented in **Figure 6-1**.



**Figure 6-1.** GHG Reduction Measure Co-Benefit



The assumptions, sources, and methodology used for each measure are provided in a detailed technical appendix (**Appendix D**), and further information about the implementation of each measure is included in **Chapter 8**.

**ENERGY EFFICIENCY & CONSERVATION**

**GOAL: REDUCE ENERGY USE IN EXISTING COUNTY FACILITIES 20% BY 2020.**

**1. Facility Energy Efficiency**

Continue to retrofit existing County facilities and implement energy conservation measures and efficiency programs.

**Supporting Actions:**

- Implement HVAC and lighting retrofits as identified in energy audits.
- Complete weatherization measures and HVAC adjustments to improve occupant thermal comfort and reduce the use of personal heating and cooling devices.
- Identify and implement energy-saving measures when leasing or purchasing additional facilities for County use.
- Incorporate demonstration and educational energy conservation measures improvements into County facilities.
- Continue to pursue funding sources to implement additional energy efficiency measures at existing County facilities, including grants, low-interest loans, and reinvestment of energy cost savings from retrofits already completed.

**Sustainability in Practice:**

In 2009, the County received a grant through the American Recovery and Reinvestment Act’s Energy Efficiency Conservation Block Grant (EECBG) program. A portion of the grant has been devoted to auditing and retrofitting HVAC and outdoor lighting systems at existing County facilities. Following completion of these retrofits, the County will identify additional energy conservation measure to be implemented and potential funding sources to complete the retrofits.

**Relevant COSE Policies:** AQ 4.3.3, E 1.3.1



**Emissions Reductions**

2010:  
-60 MTCO<sub>2</sub>e/yr

2020:  
-370 MTCO<sub>2</sub>e/yr

2035:  
-400 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Emissions Reductions**

2020:

-90 MTCO<sub>2</sub>e/yr

2035:

-80 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**Implementation:**

|                                |                                                                         |
|--------------------------------|-------------------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                                          |
| Implementation Time Frame:     | Mid-Term                                                                |
| County Costs:                  | Medium                                                                  |
| County Savings:                | Medium                                                                  |
| Performance Indicators:        | Number of facilities retrofitted<br>Energy savings at County facilities |

**2. Energy Conservation & Education**

Promote energy conservation through educational and competition-based programs.

**Supporting Actions:**

- Enroll and participate in the Energy Star Challenge.
- Develop a competition among County departments to conserve energy.

**Sustainability in Practice:**

Current efforts by the County to distribute energy conservation education include the distribution of Flex Your Power flyers and reminders to departments about thermostat guidelines and the need to conserve energy, typically when transitioning from warmer to cooler weather and vice versa. This measure will direct the development of an energy conservation competition among departments to further expand participation by County employees in energy conservation.

**Relevant COSE Policies:** AQ 4.3.3, E 1.3, E 3.4

**Implementation:**

|                                |                          |
|--------------------------------|--------------------------|
| <b>Responsible Department:</b> | <b>County Green Team</b> |
| Implementation Time Frame:     | Mid-Term                 |
| County Costs:                  | Low                      |

|                         |                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------|
| County Savings:         | Low-Mid                                                                              |
| Performance Indicators: | Participation in energy conservation programs<br>Energy savings at County facilities |



**3. Computer Network Upgrades**

Reduce computer energy use through software, hardware, and network upgrades.

**Supporting Actions:**

- Upgrade remote access capabilities to allow employees to access the network remotely rather than through County desktop computers.
- Require all new computers, monitors, and office equipment to be Energy Star certified.

**Sustainability in Practice:**

Computer monitors and office equipment that is left on when not in use can contribute significantly to the County’s energy costs. The energy reductions of this measure rely on two actions: ensure that computers do not need to be left on overnight for employee remote access, and require that all new computer and office equipment is Energy Star certified, ensuring that the County has the most energy-efficient equipment.

**Relevant COSE Policies:** AQ 4.3.3, E 1.3.1

**Implementation:**

|                                |                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                                                      |
| Implementation Time Frame:     | Mid-Term                                                                            |
| County Costs:                  | Low                                                                                 |
| County Savings:                | Low                                                                                 |
| Performance Indicators:        | Number of Energy Star certified computers, monitors, and pieces of office equipment |

**Emissions Reductions**

2020:

-10 MTCO<sub>2</sub>e/yr

2035:

-30 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Emissions Reductions**

2020:

Supporting Measure –  
Not Quantified

2035:

Supporting Measure –  
Not Quantified

**Co-Benefits**



**4. Operations & Maintenance**

Develop green building operation and maintenance guidelines to be followed by County employees and contractors.

**Sustainability in Practice:**

The development of operations and maintenance manual, or the update of the current procedures manual, will ensure that the County’s new and existing facilities continue to function in an efficient and healthy manner. The guidelines will include, at a minimum, use of recycled-content, formaldehyde-free fiberglass insulation cellulose insulation or other natural insulation products; no- or low-volatile organic compounds (VOC); formaldehyde-free paints, stains, and adhesives; no- or low-VOC furniture, particleboard, and cabinetry; and utilization of exposed concrete as a finished floor.

**Relevant COSE Policies:** E 4.3

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b> |
|--------------------------------|--------------------------------|
| Implementation Time Frame:     | Near-Term                      |
| County Costs:                  | Low                            |
| County Savings:                | Low                            |
| Performance Indicators:        | None                           |

**5. Tree Planting**

Continue to plant trees for building shading and carbon sequestration purposes.

**Supporting Actions:**

- Plant additional deciduous trees along south-, east-, or west-facing walls to reduce building heat gain where the trees will not interfere with sewer laterals and/or photovoltaic installations.
- Continue to replace damaged or diseased trees and plant additional trees at County parks and golf courses.
- Continue to plant trees in County parks through the Parks Foundation Plant-a-Tree donation program.
- Encourage tree mitigation projects on County parks and lands.

**Sustainability in Practice:**

Trees have multiple GHG reduction benefits including carbon sequestration, shading effects on buildings, and urban heat island mitigation. By planting trees at County facilities, the County can reduce electricity costs from nearby buildings and sequester carbon through the planting of additional trees at County parks and golf courses.

**Implementation:**

|                                |                                |
|--------------------------------|--------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b> |
| Implementation Time Frame:     | Mid-Term                       |
| County Costs:                  | Low-Mid                        |
| County Savings:                | Low                            |
| Performance Indicators:        | Number of trees planted        |

**6. Streetlights & Traffic Signals**

Replace lighting and traffic signal fixtures with more efficient light-emitting diode (LED) lighting.



**Emissions Reductions**

2010:  
-30 MTCO<sub>2</sub>e/yr

2020:  
-70 MTCO<sub>2</sub>e/yr

2035:  
-120 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Emissions Reductions**

2020:  
-20 MTCO<sub>2</sub>e/yr  
2035:  
-30 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**Supporting Actions:**

- Retrofit streetlights with LED lighting technology.
- Retrofit traffic signals with LED light fixtures.

**Sustainability in Practice:**

This measure quantifies the effect of replacing all streetlights with energy-efficient models. The County has received grant funding through the EECBG program to replace 18 of the County’s traffic signals. Completion of this measure assumes additional action and investment is taken by the County to replace the remaining lights not funded by the EECBG program. Additional programs that the County can pursue in conjunction with Pacific Gas and Electric (PG&E) include loan programs provided by the California Energy Commission.

**Implementation:**

| <b>Responsible Department:</b> | <b>Public Works</b>                                    |
|--------------------------------|--------------------------------------------------------|
| Implementation Time Frame:     | Near-Term                                              |
| County Costs:                  | Low                                                    |
| County Savings:                | Low-Mid                                                |
| Performance Indicators:        | Number of streetlights and traffic signals retrofitted |

**7. New Facilities**

Require new or renovated County facilities to meet or exceed CALGreen’s Tier 1 or the intent of the LEED Silver requirements.

**Supporting Actions:**

- Continue to require Utility Coordinator review of new facilities for opportunities to meet or exceed energy efficiency requirements.

- Orient and design new facilities to maximize natural lighting and climate regulation.
- “Right-size” new facilities to meet anticipated uses.
- Pre-wire new facilities to accommodate solar PV and/or electric car charging stations.

**Sustainability in Practice:**

SLO County will lead by example in developing new facilities that meet or exceed the CALGreen Tier 1 requirements or the intent of the LEED Silver requirements. Building facilities that meet these standards will ensure that the County’s future energy use is minimized. Additionally, these public buildings will demonstrate to the community sustainable building practices and their effective implementation.

**Relevant COSE Policies:** E 2.1

**Implementation:**

|                                |                                                                 |
|--------------------------------|-----------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                                  |
| Implementation Time Frame:     | Ongoing                                                         |
| County Costs:                  | Low-Mid                                                         |
| County Savings:                | Medium                                                          |
| Performance Indicators:        | Number of facilities meeting Tier 1 or LEED Silver requirements |



**Emissions Reductions**

2020:

-260 MTCO<sub>2</sub>e/yr

2035:

-700 MTCO<sub>2</sub>e/yr

**Co-Benefits**





Emissions Reductions

2010:  
-120 MTCO<sub>2</sub>e/yr

2020:  
-700 MTCO<sub>2</sub>e/yr

2035:  
-820 MTCO<sub>2</sub>e/yr

Co-Benefits



RENEWABLE ENERGY

**GOAL: INCREASE THE USE OF RENEWABLE ENERGY SOURCES IN COUNTY FACILITIES TO ACCOUNT FOR 10% OF TOTAL ENERGY USED.**

**8. Renewable Energy**

Explore opportunities to install alternative energy and co-generation facilities.

**Supporting Actions:**

- Install solar PV on facilities with adequate space and orientation.
- Consider use of solar equipment to support lighting facilities at County parks, parking lots, restrooms, and for irrigation pumping.
- Install co-generation equipment at County facilities.
- Install renewable energy systems like co-generation or solar thermal hot water equipment at County pool facilities.
- Seek funding or financing opportunities for renewable energy installations on County facilities.

**Sustainability in Practice:**

This is the second part of a multi-tiered approach to reduce conventional energy consumption and associated GHG emissions in County facilities. The County will continue to install renewable energy systems at County facilities, including photovoltaic arrays and co-generation facilities.

**Relevant COSE Policies:** E 1.3

**Implementation:**

| Responsible Department:    | General Services Agency                 |
|----------------------------|-----------------------------------------|
| Implementation Time Frame: | Mid-Term                                |
| County Costs:              | High                                    |
| County Savings:            | High                                    |
| Performance Indicators:    | Megawatts of renewable energy installed |

WASTE REDUCTION

**GOAL: REDUCE THE AMOUNT OF WASTE GENERATED AT COUNTY FACILITIES AND INCREASE THE COUNTY'S WASTE DIVERSION RATE TO 80% BY 2020.**

**9. Park & Golf Course Recycling**

Work with the Integrated Waste Management Authority (IWMA) to develop and implement a recycling program at the County's parks and golf courses.

**Sustainability in Practice:**

Many local governments have found it difficult to effectively implement recycling at park facilities, encountering a significant rate of contamination as park users mix food scraps and other waste with glasses and bottles. The County will work with IWMA to develop and implement a program to recycle waste at County-operated parks. Public education will be a key component to the effective implementation of this program to reduce the amount of contamination in recycling bins.

**Relevant COSE Policies:** E 5.2.2

**Implementation:**

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                                 |
| Implementation Time Frame:     | Mid-Term                                                       |
| County Costs:                  | Medium                                                         |
| County Savings:                | Low                                                            |
| Performance Indicators:        | Percentage of parks and golf courses with recycling facilities |

**10. Paperless Records**

Continue to implement paperless records management and reduce the amount of paper purchased.



**Emissions Reductions**

2020:

-30 MTCO<sub>2</sub>e/yr

2035:

-40 MTCO<sub>2</sub>e/yr



**Emissions Reductions**

2010:  
-10 MTCO<sub>2</sub>e/yr

2020:  
-10 MTCO<sub>2</sub>e/yr

2035:  
-10 MTCO<sub>2</sub>e/yr

**Emissions Reductions**

2020:  
Supporting Action – Not Quantified

2035:  
Supporting Action – Not Quantified

**Co-Benefits**



**Supporting Actions:**

- Continue to post public documents, agendas, and staff reports online, and consider charging a fee for printed materials.

**Sustainability in Practice:**

The County has already made significant efforts to reduce the amount of paper used for records management. Since 2005, the County has implemented integrated document management systems within Human Resources, Auditor-Controller, Assessor, Treasurer-Tax Collector, and County Counsel and is working on implementation in the Planning and Building and Public Works departments. Since implementation, the County has achieved a 68% reduction in paper purchasing and printing. This reduction in paper use not only reduces associated costs but will decrease the amount of paper waste disposed at County facilities.

**Relevant COSE Policies:** E 5.2

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b> |
|--------------------------------|--------------------------------|
| Implementation Time Frame:     | Ongoing                        |
| County Costs:                  | Low-Mid                        |
| County Savings:                | Medium                         |
| Performance Indicators:        | Annual print counts            |

**11. Environmentally Preferable Purchasing Policy**

Develop and implement an environmentally preferable purchasing (EPP) policy to purchase recycled content and toxic-free products for County supplies, equipment, and services and to promote recycling markets.

**Sustainability in Practice:**

The County will develop and implement an environmentally preferable purchasing policy that will direct the County and its contractors on the purchase of environmentally preferable products. The policy will include, at a minimum, direction on the purchasing of:

- Energy-efficient products;
- Recycled-content products;
- Safer chemical products;
- Water-efficient products; and
- Fuel-efficient, environmentally sensitive vehicles.

**Relevant COSE Policies:** E 5.2.1

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b> |
|--------------------------------|--------------------------------|
| Implementation Time Frame:     | Near-Term                      |
| County Costs:                  | Low-Mid                        |
| County Savings:                | Low                            |
| Performance Indicators:        | none                           |

**12. Compost Facilities**

Explore opportunities to compost food and yard waste at County facilities.

**Supporting Actions:**

- Identify the potential facilities where effective composting can be accomplished in addition to green waste.



**Emissions Reductions**

2020:

-80 MTCO<sub>2</sub>e/yr

2035:

-190 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Sustainability in Practice:**

The County will determine high-volume food and green waste disposal facilities and phase in the implementation of food and green waste composting operations. County golf courses are currently working with IWMA to become zero-waste facilities by constructing on-site composting facilities to collect food, paper, and green waste materials. Additional facilities that may implement composting programs include County-operated jails, concessionaires and cafeterias at County parks and facilities, and community centers where events are held.

**Relevant COSE Policies:** E 5.2

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b>                                     |
|--------------------------------|--------------------------------------------------------------------|
| Implementation Time Frame:     | Mid-Term                                                           |
| County Costs:                  | Medium                                                             |
| County Savings:                | Low-Mid                                                            |
| Performance Indicators:        | Amount of food waste and green waste diverted at County facilities |

**Emissions Reductions**

2020:  
-20 MTCO<sub>2</sub>e/yr

2035:  
-30 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**13. Construction & Demolition Waste**

Require a minimum of 75% of County non-hazardous construction and demolition waste to be salvaged or recycled.

**Supporting Actions:**

- County departments will continue to offer materials and equipment to other county facilities prior to disposal.

**Sustainability in Practice:**

The County will continue to support markets for construction material reuse by recycling a minimum of 75% of the waste from facility renovations, new construction, and infrastructure projects.

**Relevant COSE Policies:** E 5.2

**Implementation:**

|                                |                                                                               |
|--------------------------------|-------------------------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>Public Works, General Services Agency</b>                                  |
| Implementation Time Frame:     | Ongoing                                                                       |
| County Costs:                  | Low                                                                           |
| County Savings:                | Low                                                                           |
| Performance Indicators:        | Percentage of construction and demolition waste diverted from County projects |



**14. Vehicle Auctions**

Continue to auction off retired vehicles and equipment.

**Sustainability in Practice:**

The County currently auctions off underutilized or retired vehicles and equipment on an annual basis. This practice extends the life of these vehicles by allowing them to remain in operation. Alternatively, vehicles can be deconstructed and the parts used to repair other vehicles. Money from the auctioning of County vehicles goes back to each department to purchase new vehicles. This additional revenue can help the departments to afford higher-cost hybrids when replacing vehicles, providing long-term fuel and cost savings.

**Relevant COSE Policies:** E 5.2

**Implementation:**

|                                |                                                   |
|--------------------------------|---------------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                    |
| Implementation Time Frame:     | Ongoing                                           |
| County Costs:                  | Low                                               |
| County Savings:                | Medium                                            |
| Performance Indicators:        | County fleet size<br>Number of vehicles auctioned |

**Emissions Reductions**

2010:

Supporting Measure –  
Not Quantified

2020:

Supporting Measure –  
Not Quantified

2035:

Supporting Measure –  
Not Quantified



**Emissions Reductions**

2010:

-3 MTCO<sub>2</sub>e/yr

2020:

-60 MTCO<sub>2</sub>e/yr

2035:

-110 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**VEHICLE FLEET**

**GOAL: REDUCE EMISSIONS FROM THE COUNTY'S VEHICLE FLEET BY USING ALTERNATIVE FUELS AND DECREASING VEHICLE MILES TRAVELED.**

**15. Hybrid Vehicles**

Substantially increase the number and proportion of alternative fuel, high fuel economy, electric, and hybrid vehicles and use of these vehicles within the County's fleet.

**Supporting Actions:**

- Promote employee use of hybrid vehicles when available over less fuel-efficient vehicles.
- Review ongoing vehicle replacement acquisitions within the County fleet for opportunities to substitute alternative fuel vehicles, hybrid vehicles and all electric vehicles for conventional gasoline powered vehicles.

**Sustainability in Practice:**

To date, Fleet Services has purchased three hybrid vehicles. The County is seeking every opportunity to purchase vehicles that will reduce the consumption of fossil fuels while reducing County vehicle operations and maintenance costs.

**Relevant COSE Policies:** AQ 2.3

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b>                     |
|--------------------------------|----------------------------------------------------|
| Implementation Time Frame:     | Ongoing                                            |
| County Costs:                  | Low-Mid                                            |
| County Savings:                | Low-Mid                                            |
| Performance Indicators:        | Number of hybrid vehicles<br>Reduction in fuel use |

**16. Car Sharing**

Increase participation in the County’s car-sharing membership.

**Supporting Actions:**

- Provide incentives and management support to facilitate use of carsharing by all departments as an option to reduce the size of the County-owned vehicle fleet.
- Work with car-sharing companies to expand the availability of car-sharing vehicles throughout the county.

**Sustainability in Practice:**

In 2010, the County became a member of the local car-sharing company, FunRide. Membership in this program allows County employees to utilize alternative-fuel and fuel-efficient vehicles for work-related business when County fleet vehicles are not available. Increased participation in this program over time may allow the County to reduce the size of the vehicle fleet while providing greater flexibility to employees on the type of vehicle used for County business.

**Relevant COSE Policies:** AQ 2.3

**Implementation:**

| <b>Responsible Department:</b> | <b>All Departments</b>                                                                                                  |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Implementation Time Frame:     | Ongoing                                                                                                                 |
| County Costs:                  | Medium                                                                                                                  |
| County Savings:                | Low                                                                                                                     |
| Performance Indicators:        | Number of participants in car-share membership<br>Annual VMT in car-share vehicles<br>VMT/fleet size of County vehicles |



**Emissions Reductions**

2010:  
-2 MTCO<sub>2</sub>e/yr

2020:  
-60 MTCO<sub>2</sub>e/yr

2035:  
-110 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Emissions Reductions**

2020:

-3 MTCO<sub>2</sub>e/yr

2035:

-20 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**17. Alternative Fuels**

Explore the use of alternative fuels in County vehicles and support the development of alternative fueling stations in the county through participation in the Central Coast Clean Cities Coalition (C5).

**Supporting Actions:**

- Develop additional fueling and storage facilities for the County’s vehicle fleet.

**Sustainability in Practice:**

The County is a current member of the Central Coast Clean Cities Coalition, an organization committed to expanding the use and availability of clean and alternative-fuel vehicles. The County will continue to participate in this program and will evaluate options for converting portions of the County fleet from conventional fossil fuels to cleaner alternative fuels as their availability continues to grow.

**Relevant COSE Policies:** AQ 2.3, AQ 2.5

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b>      |
|--------------------------------|-------------------------------------|
| Implementation Time Frame:     | Long-Term                           |
| County Costs:                  | Low-Mid                             |
| County Savings:                | Low                                 |
| Performance Indicators:        | Number of alternative-fuel vehicles |

**EMPLOYEE COMMUTE**

**GOAL: PROVIDE ADDITIONAL OPPORTUNITIES FOR EMPLOYEES TO UTILIZE ALTERNATIVE TRANSPORTATION OPTIONS AND REDUCE COMMUTE LENGTHS.**

**18. New Facility Location**

Take into consideration facility location, proximity to other facilities, access to transit, and ability to provide bike storage facilities when constructing or leasing new facilities.

**Supporting Actions:**

- Locate facilities within a ½ mile of transit stops or centers.
- Include bicycle commuter facilities, including bike storage, lockers, and showers, at all new and remodeled facilities.

**Sustainability in Practice:**

Development of South and North County Government Centers will not only decrease vehicle miles traveled (VMT) for the community traveling to County offices but also for employees who currently must travel from their residences to more central locations. Additionally, the development of County regional centers within existing communities will expand employee opportunities to utilize transit or bike or walk to work. This measure ensures that new and remodeled buildings will provide bicycle commuter facilities and bike parking.

**Relevant COSE Policies:** AQ 2.1, AQ 1.7

**Implementation:**

|                                |                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                                                     |
| Implementation Time Frame:     | Long-Term                                                                          |
| County Costs:                  | Low                                                                                |
| County Savings:                | n/a                                                                                |
| Performance Indicators:        | Number of new facilities within a ½ mile of transit<br>Employee commute mode share |



**Emissions Reductions**

2020:

-290 MTCO<sub>2</sub>e/yr

2035:

-510 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Emissions Reductions**

2010:  
-50 MTCO<sub>2</sub>e/yr

2020:  
-80 MTCO<sub>2</sub>e/yr

2035:  
-150 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**19. Rideshare Participation**

Increase participation in Rideshare commuter programs.

**Supporting Actions:**

- Provide targeted outreach to departments with less than 25% participation in Rideshare programs.
- Encourage additional participation in Rideshare's Bike Month and Commute for Cash Challenges.
- Work with Rideshare to conduct an annual employee commute survey.

**Sustainability in Practice:**

The County is one of the top employers in San Luis Obispo County; employee commuting contributes both County and community-wide GHG emissions. The County will continue to participate in the SLO Regional Rideshare program by offering incentives to employees who utilize alternatives modes like carpooling, biking, walking, or transit to get to and from work.

**Relevant COSE Policies:** AQ 2.1

**Implementation:**

| <b>Responsible Department:</b> | <b>All Departments</b>                           |
|--------------------------------|--------------------------------------------------|
| Implementation Time Frame:     | Ongoing                                          |
| County Costs:                  | Low                                              |
| County Savings:                | n/a                                              |
| Performance Indicators:        | Participation in SLO Regional Rideshare programs |

**20. Alternative Work Schedules**

Standardize County telecommuting and alternative work schedule policies among departments to facilitate participation as appropriate to job classifications.

**Sustainability in Practice:**

In 2010, the County Board of Supervisors adopted new telecommute and alternative work schedule policies in an effort to reduce employee commute emissions without compromising public services. The policies allow employees to work remotely or to work a compressed workweek, reducing the need for additional commuting trips.

**Relevant COSE Policies:** AQ 2.1

**Implementation:**

|                                |                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Responsible Department:</b> | <b>All Departments</b>                                                                        |
| Implementation Time Frame:     | Near-Term                                                                                     |
| County Costs:                  | Low                                                                                           |
| County Savings:                | n/a                                                                                           |
| Performance Indicators:        | Number of employees telecommuting<br>Number of employees utilizing alternative work schedules |

**21. Parking Passes**

Implement workplace parking pricing at County employment centers in Downtown San Luis Obispo. Charge employees wishing to utilize a parking space provided by the County a daily or monthly fee.

**Supporting Actions:**

- Utilize the funds collected from employee parking charges to fund alternative commute programs.



**Emissions Reductions**

2010:  
-240 MTCO<sub>2</sub>e/yr

2020:  
-240 MTCO<sub>2</sub>e/yr

2035:  
-290 MTCO<sub>2</sub>e/yr

**Co-Benefits**





**Emissions Reductions**

2020:  
-40 MTCO<sub>2</sub>e/yr

2035:  
-40 MTCO<sub>2</sub>e/yr

**Co-Benefits**



**Sustainability in Practice:**

Charging for parking that is currently provided for free to County employees has the potential to reduce VMT associated with employee commuting. By removing the subsidy currently provided to employees parking in County parking lots, the costs of driving will be more accurately reflected, making alternative mode choices a more attractive option. Additionally, charging for the use of these spaces will generate funding that can assist in implementing additional employee commute trip reduction programs.

**Relevant COSE Policies:** AQ 2.1

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b> |
|--------------------------------|--------------------------------|
| Implementation Time Frame:     | Mid-Term                       |
| County Costs:                  | Generates revenues             |
| County Savings:                | n/a                            |
| Performance Indicators:        | Employee commute mode share    |

**WATER CONSERVATION**

**GOAL: REDUCE WATER USE IN COUNTY FACILITIES 20% BY 2020.**

**22. Water Fixture Retrofits**

Retrofit facilities with water-efficient fixtures.

**Supporting Actions:**

- Install timers and sensors on toilet and sink fixtures in all facilities.
- Replace inefficient water fixtures with efficient models that do not exceed 1.6 gallons per flush for toilets and 2.0 gallons per minute for showers.

**Sustainability in Practice:**

Implementing water fixture retrofits at County facilities will reduce County potable water use and has the potential to provide the County with significant cost savings.

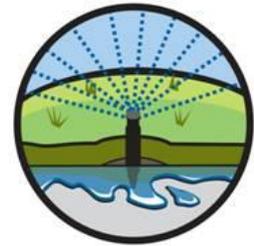
**Relevant COSE Policies:** WR 4.3.3

**Implementation:**

|                                |                                |
|--------------------------------|--------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b> |
| Implementation Time Frame:     | Mid-Term                       |
| County Costs:                  | Low-Mid                        |
| County Savings:                | Low-Mid                        |
| Performance Indicators:        | Number of fixtures replaced    |

**23. Water-Efficient Landscape**

Replace County-maintained turf landscapes (not including park recreational fields or areas) with water-efficient landscapes and demonstration gardens.



**Emissions Reductions**

2020:

Supporting Measure – Not Quantified

2035:

Supporting Measure – Not Quantified

**Co-Benefits**





**Emissions Reductions**

2010:

Supporting Measure –  
Not Quantified

2020:

Supporting Measure –  
Not Quantified

2035:

Supporting Measure –  
Not Quantified

**Co-Benefits**



**Supporting Actions:**

- Evaluate existing irrigation systems to identify leaks and replace irrigation heads with more efficient fixtures.
- Replace turf areas that are not used for recreation purposes with native species and drip irrigation systems.

**Sustainability in Practice:**

In recent years, the County’s parks have achieved a 10% reduction in water use through the implementation of irrigation system efficiency upgrades to comply with the County Stormwater Pollution Prevention Plan. The County is also identifying existing turf landscapes that can be replaced with native landscaping. Native landscaping will reduce the amount of water needed and will serve as a demonstration garden for the community. The SLO Botanical Garden will soon be removing turf from the San Luis Obispo courthouse building and replacing the turf with a native landscape demonstration garden.

**Relevant COSE Policies:** WR 4.3.1, WR 4.3.3

**Implementation:**

| <b>Responsible Department:</b> | <b>General Services Agency</b>               |
|--------------------------------|----------------------------------------------|
| Implementation Time Frame:     | Mid-Term                                     |
| County Costs:                  | Low-Mid                                      |
| County Savings:                | Low-Mid                                      |
| Performance Indicators:        | Acres of turf replaced with native landscape |

**24. Golf Course Water Use**

Continue to reduce water use on County golf courses through participation in the Audubon International Cooperative Sanctuary Program.

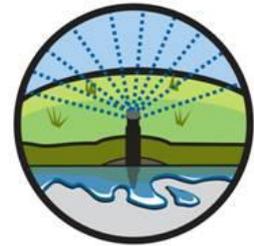
**Sustainability in Practice:**

In recent years, the County-operated golf courses have continued to improve the environmental sustainability of each facility through participation in the Audubon International Cooperative Sanctuary Program. Actions to reduce the environmental impact of the County’s golf courses include:

- Reduced water use,
- Replacement of turf with native, water-efficient landscaping,
- Development of a composting program,
- Reuse of construction materials,
- Continued planting of native trees, and
- Reduced fertilizer and pesticide application.

**Implementation:**

|                                |                                               |
|--------------------------------|-----------------------------------------------|
| <b>Responsible Department:</b> | <b>General Services Agency</b>                |
| Implementation Time Frame:     | Ongoing                                       |
| County Costs:                  | Low-Mid                                       |
| County Savings:                | Medium                                        |
| Performance Indicators:        | Reduction in water use at County golf courses |



**Emissions Reductions**

2010:  
Supporting Measure –  
Not Quantified

2020:  
Supporting Measure –  
Not Quantified

2035:  
Supporting Measure –  
Not Quantified

**Co-Benefits**





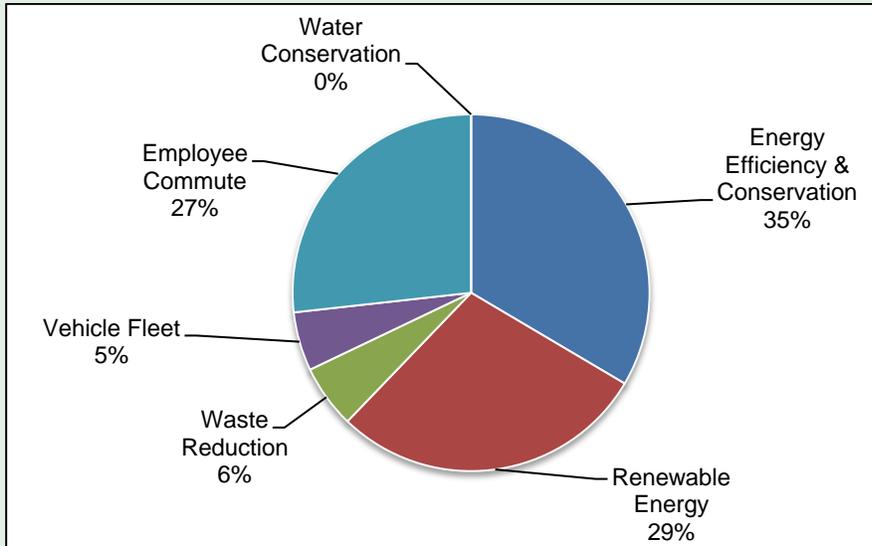
### County Government Operations GHG Emissions Reduction Summary

To date, the County has already reduced GHG emissions by 515 MTCO<sub>2</sub>e from 2006 baseline emissions levels (Table 6-1). Continued implementation of both new and existing programs will ensure the County reaches the adopted reduction target of 15% below baseline levels by 2020 (Figure 6-1). To reach the reduction target, the County will need to reduce GHG emissions by a minimum of 1,800 MTCO<sub>2</sub>e (Figure 6-2).

**Table 6-1.** GHG Emissions Reduction Summary by Goal

|                                  | <b>2010<br/>MTCO<sub>2</sub>e/yr</b> | <b>2020<br/>MTCO<sub>2</sub>e/yr</b> | <b>2035<br/>MTCO<sub>2</sub>e/yr</b> |
|----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Energy Efficiency & Conservation | -90                                  | -820                                 | -1,360                               |
| Renewable Energy                 | -120                                 | -700                                 | -820                                 |
| Waste Reduction                  | -10                                  | -140                                 | -270                                 |
| Vehicle Fleet                    | -5                                   | -120                                 | -240                                 |
| Employee Commute                 | -290                                 | -660                                 | -990                                 |
| Water Conservation               | n/a                                  | n/a                                  | n/a                                  |
| <b>Total Reductions</b>          | <b>-515</b>                          | <b>-2,440</b>                        | <b>-3,680</b>                        |

**Figure 6-2.** 2020 GHG Emissions Reduction Summary by Goal



**Figure 6-3.** GHG Emissions Reduction Target Achievement

