Welcome to the County of San Diego’s 2018 Climate Action Plan Annual Monitoring Report!

The County of San Diego (County) is committed to helping all communities thrive and preserve the region’s unique and diverse natural resources while maintaining unincorporated community character. The unincorporated portion of the county encompasses approximately 3,570 square miles with a 2019 population of 515,403 residents. The unincorporated area is home to 26 distinct communities that vary from suburban densities adjacent to neighboring incorporated cities, to lower density rural communities surrounded by hillsides, deserts, and agricultural lands.

The County’s Climate Action Plan (CAP), which was recommended for approval by the Planning Commission and adopted by the Board of Supervisors on February 14, 2018, is the County’s plan to reduce greenhouse gas (GHG) emissions within the unincorporated communities and County-owned facilities. The CAP was prepared in coordination with top climate planning and environmental experts that included Ascent Environmental, and the Energy Policy Initiatives Center, a non-profit research center of the University of San Diego School of Law. These industry experts have worked on dozens of adopted CAPs in California and regularly coordinate with jurisdictions on methods to implement state GHG legislation. Supportive documentation for the CAP calculations and findings are provided by the following: 2014 GHG Emissions Inventory and Projections Report, GHG Emissions Reduction Targets, Measures, and Gap Analysis, CAP Implementation Cost Report, CAP Cost Effectiveness Analysis, Preliminary Assessment of the County of San Diego Local Direct Investment Program, and the CAP Consistency Review Checklist.

The CAP builds upon and expands on other County efforts such as the Strategic Energy Plan, Strategic Plan to Reduce Waste, and the Live Well San Diego Food System Initiative and is the culmination of robust collaboration with over 50 stakeholder groups in the environmental, business, and community sectors. Multiple County departments oversee enforceable, achievable, and measurable GHG reductions efforts to increase water and energy efficiency, decrease air pollution and waste, conserve agriculture and open space, and improve access to sustainable transportation.

The CAP is designed to be a living document, with regular monitoring timelines to provide opportunities to respond to new technologies, new legislation, and course correct for under- or over-performing measures. This first Annual Monitoring Report (Annual Report) summarizes CAP measure implementation progress toward GHG reductions targets through 2018. The CAP inventory will be updated in 2020 to provide an updated snapshot of the GHG emissions sources within the unincorporated county and County facilities, and the CAP itself will be updated in 2025 to ensure that the County’s CAP measures will meet the 2030 target, and 2050 goal.

Currently the CAP’s Environmental Impact Report (EIR) is being challenged in court and although the EIR is in litigation, the County chooses to continue to implement the CAP measures because the physical effects of climate change are becoming more evident every year and there is no time to waste. This Annual Report demonstrates that the County is on track to meet the 2020 GHG emissions reduction target and provides an early look at progress toward the 2030 emissions target.

To learn how you can contribute to the County’s climate planning and sustainability efforts, please read this report and visit the updated CAP website at sandiegocounty.gov/sustainability.
The Climate Action Plan (CAP) reduces greenhouse gas emissions through 26 enforceable, achievable, and quantifiable measures within five sectors:

- BUILT ENVIRONMENT & TRANSPORTATION
  - Growth management
  - Land conservation
  - Street improvements
  - Fleet efficiency

- ENERGY
  - Efficiency projects
  - Conservation
  - Green Building
  - Renewable energy generation
  - Solar permitting

- SOLID WASTE
  - Reduction
  - Reuse
  - Recycling
  - Composting
  - Education

- WATER & WASTE WATER
  - Conservation
  - Water wise landscaping
  - Rainwater harvesting

- AGRICULTURE & CONSERVATION
  - Tree planting
  - Equipment replacement

WHAT IS MEASURED
From solar panels installed on homes in Borrego Springs to capturing rain in Jamul, we track how all 26 County CAP measures contribute to our GHG emissions reduction targets. In 2018 there were ten measures that were required to be quantified in order to begin tracking progress toward the 2020 target. The remaining 16 measures require the development of programs, plans, or ordinance updates for emissions reductions tracking toward the 2030 target. You can find our quantified progress on the ten measures on the next page, and detailed info about all 26 measures at our website:

sandiegocounty.gov/sustainability

HOW IT IS MEASURED
You can’t count what you don’t measure. The County measures progress toward the 2020 target by capturing the number of acres of agricultural easements preserved, fleet fuel consumption, energy consumed, solar installed, renewable energy produced, water consumed, rain barrels distributed, irrigation pumps converted and trees planted since our baseline year (2014), when our first greenhouse gas inventory was prepared. We use that data as an input into a greenhouse gas emissions calculator we developed to measure emissions reductions. This allows us to identify where our work is most effective and devote resources to achieve future targets.

HOW THE CAP ADAPTS
The County reports annually on the CAP, conducts biennial greenhouse gas emissions inventories, and updates the CAP every five years, beginning in 2025. Continual monitoring allows for future updates to the CAP to adapt as new programs and technology become available, accommodate changes in legislation, and course correct for measures that may be underperforming or overperforming.

VISIT THE CAP ONLINE
Learn more about the status of each CAP measure, target, and implementation approach at sandiegocounty.gov/cap/dashboard.

County GHG reductions are equivalent to saving enough energy to power an average of 18,112 U.S. homes for one year.

<table>
<thead>
<tr>
<th>CAP MEASURES WITH 2020 TARGET</th>
<th>2020 TARGET</th>
<th>PROGRESS THROUGH 2018</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1.1 Acquire Conservation Land</td>
<td>2,422 acres</td>
<td>3,428 acres (4,421 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>T-1.2 Acquire Agricultural Easements</td>
<td>443 acres</td>
<td>793 acres (97 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
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<td>T-1.1 Acquire Conservation Land</td>
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<td>T-1.2 Acquire Agricultural Easements</td>
<td>443 acres</td>
<td>793 acres (97 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>T-3.4 Reduce County’s Fleet Emissions</td>
<td>10% reduction</td>
<td>11% reduction (0.2% MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>E-1.4 Reduce County Energy Use Intensity</td>
<td>10% reduction</td>
<td>20% reduction (4.472 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>E-2.3 Install Solar on Existing Homes</td>
<td>25,273 homes</td>
<td>38,510 homes (94,360 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>E-2.4 Generate On-Site Renewable Energy for County Operations</td>
<td>10% reduction</td>
<td>6.5% renewable (1,281 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>W-1.3 Reduce County Water Consumption</td>
<td>15% reduction</td>
<td>13% reduction (101 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>W-2.1 Increase Rain Barrel Installations</td>
<td>Install 1,200</td>
<td>7,318 installed (117 MTCO2e)</td>
<td>Exceeded target</td>
</tr>
<tr>
<td>A-1.2 Convert Irrigation Pumps to Electric</td>
<td>Convert 4 pumps</td>
<td>0 pumps (0 MTCO2e)</td>
<td>Incentives implementation in progress</td>
</tr>
<tr>
<td>A-2.2 Increase County Tree Planting</td>
<td>Plant 14,000 trees</td>
<td>13,930 planted (415 MTCO2e)</td>
<td>99% toward target</td>
</tr>
</tbody>
</table>

The County reduced 103,643 MTCO2e of greenhouse gas emissions (GHG) through ten quantified measures listed in the table below within the built environment & transportation, energy, water & wastewater, and agriculture & conservation GHG emissions sectors. Find status updates on all 26 measures online at sandiegocounty.gov/sustainability/dashboard.

<table>
<thead>
<tr>
<th>WHAT IS MEASURED</th>
<th>2018 STATUS</th>
<th>2020 TARGET = 132,205 MTCO2e REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy for County Operations</td>
<td>5.5% renewable (2,796 MTCO2e)</td>
<td>7,926 MTCO2e</td>
</tr>
<tr>
<td>WATER &amp; WASTEWATER</td>
<td>2.6 U.S. EPA, Greenhouse Gas Equivalencies Calculator, 2019</td>
<td></td>
</tr>
<tr>
<td>Built Environment &amp; Transportation</td>
<td>10% reduction (8,692 MTCO2e)</td>
<td>94,973 MTCO2e</td>
</tr>
<tr>
<td>Agriculture &amp; Conservation</td>
<td>10% reduction (493 MTCO2e)</td>
<td>493 MTCO2e</td>
</tr>
</tbody>
</table>
Agricultural Conservation PACE Program

The County reduces emissions across built, agricultural, and open space lands through:

15 Community Plan Updates by 2030

- Community plan updates to create mixed land uses
- Street improvements for safe travel by transit, bike, or foot

180 Acres in 2018

- Dedicate use to agriculture
- Reduce urban sprawl

2,202 Acres in 2018

- Protect critical wildlife habitat
- Eliminate development potential

Since 2014, the Clean Vehicle Rebate Project provides rebates up to $7,000 for the purchase or lease of new, eligible zero-emission vehicles. Learn more at cleanvehiclerebate.org.

Find more built environment measure progress at: sandiegocounty.gov/sustainability

GREENING THE COUNTY FLEET

The County’s light duty fleet of vehicles continues to transition to cleaner fuels and technology to reduce environmental impact and costs. Installing 84 electric vehicle chargers for fleet use and partnering in a regional Clean Cities Coalition demonstrates our commitment to maintaining a fuel efficient fleet. The County has also transitioned from 100% diesel to 93% renewable diesel, a clean-burning, non-petroleum fuel to power diesel fleet vehicles.

In 2018, the County reduced vehicle emissions by 11%.

Action + Progress

Built Environment & Transportation

Built environment and transportation measures decrease greenhouse gas emissions by reducing the number and length of vehicle trips through the conservation of agricultural and open space lands, planning for the use of alternative modes of transportation, encouraging a shift to electric and alternatively-fueled vehicles, and increasing the mix of uses within established community plan areas so residents can obtain goods and services closer to home.

In 2018, the County continued to update the community plan for the Alpine Community Plan Area. To prevent future development on agricultural and conservation lands, the County acquired 180 acres of agricultural easements through the Purchase of Agricultural Conservation Easements program and 2,202 acres of conservation open space through the Multiple Species Conservation Plan.

Since 2014, the Clean Vehicle Rebate Project provides rebates up to $7,000 for the purchase or lease of new, eligible zero-emission vehicles. Learn more at cleanvehiclerebate.org.

As the climate changes, we must adapt and build resiliency. To protect our region from emerging hazards such as extreme heat, wildfire, flooding, and drought, the County:

- Approved a Local Coastal Program to protect the unique environment of the County’s Coastal Zone.
- Continues to implement the Multiple Species Conservation Program to preserve unique, native habitats and wildlife.
- Developed a Multi-Jurisdictional Hazard Mitigation Plan to improve disaster resilience efforts.
- Continues to restore the San Elijo County Park to improve tidal exchange, absorb flooding from sea level rise, and expand lagoon access.

Our agricultural easement freed up capital for farm improvements. I’m glad to know the property won’t be subdivided, which takes away from the beauty of rural San Diego County.

— Matt

Avocado Farmer in Fallbrook
Energy Efficiency & Renewable Generation

The energy sector offers the greatest opportunity to achieve emissions reductions in the unincorporated county. The Department of General Services improves energy efficiency in County facilities by designing green buildings, implementing energy efficiency upgrades, and increasing solar generation to reduce the demand for electricity in our community. The County's Building Department provides incentives to increase residential solar generation and help reduce overall fossil fuel use, leading to better air quality and public health benefits. The County’s Parks and Recreation Department incorporates renewable energy systems and electric vehicle charging stations in new and existing parks, preserves, and recreational facilities.

Looking to the future, the County is pursuing a renewable energy generation program to achieve 90% renewable power by 2030 to make our community more resilient and boost our local economy.

Find more energy measures and progress at: sandiegocounty.gov/sustainability
Solid Waste Diversion

To reduce greenhouse gas emissions from waste, the Department of Public Works is implementing its Strategic Plan to Reduce Waste. The County diverts 60% of solid waste from landfills through waste reduction, recycling, and composting programs by helping residents and businesses reduce, reuse, and recycle waste. Next, the County aims to divert more organic material and construction and demolition debris from landfills to extend county landfill life, reduce transportation costs, avoid methane emissions, and improve air quality. Organic waste processed into compost and mulch can be applied on local farms, rangelands, and gardens to improve soil health, conserve water, and reduce the need for synthetic fertilizers.

Action + Progress

ORGANIC WASTE REDUCTION

Organic materials, such as food scraps, landscape trimmings, brush, and animal manures, represent 39% of unincorporated county waste disposal.

The Department of Public Works’ recycling program reduces organic waste by:

• Preventing food waste through a restaurant guide and newsletter called Waste Not, Leftovers Wanted;
• Partnering with food facilities to encourage surplus food donation and materials like spent brewery grain for use as animal feed; and
• Encouraging composting at horse ranches and schools.

Regional Food Recovery

In 2018, the Department of Public Works collaborated with the Ramona Unified School District (District) to prevent 16,337 lbs of wasted food from heading to landfills by adjusting food preparation practices, donating food, diverting food scraps to feed animals at their local farm, and composting on site. Not surprisingly, the District’s food recovery program has garnered local, state, and national awards!

To strengthen the regional food donation network, the County’s Live Well San Diego Food System Initiative partnered with food banks, pantries, and organizations to produce a Food Donation Action Plan. The plan provides recommendations about how to recover more food and feed those experiencing food insecurity.

BY THE NUMBERS

- 60% of waste diverted in unincorporated county in 2017
- 5,318 residents and businesses assisted with recycling and hazardous waste disposal, inquiries online, by phone, and in person
- 220 school presentations on waste reduction, recycling, and composting benefiting 6,650 students
- 469 presentations and inspections to improve recycling programs, reaching 3,398 employees and residents at businesses, multi-family complexes and schools
- 220,000 guides distributed on recycling, and reduction of wasted food to residents and businesses
- 6,442 recycling bins supplied to 224 schools, commercial and multi-family facilities
- 3,911 tires collected at four tire recycling events
- 32 composting workshops for 1,495 people
- 196 composting bins donated or sold to unincorporated county schools and residents

Find more waste measures and progress at sandiegocounty.gov/sustainability

Food Recovery Hierarchy

1. Reduce the volume of surplus food generated
2. Feed Hungry People
3. Feed Animals
4. Industrial Uses
5. Composting
6. Landfill

Destination 2030

Carbon Farming

Nutritious food and healthy plants from orchards, cropland, rangeland, and farms need healthy soil. Processing organic materials such as food waste, animal waste, and green materials into compost and mulch puts nutrients back into the soil and stores carbon. To encourage this process called carbon farming, the County is:

• Ensuring that waste collection meets state-mandated organics collection requirements.
• Updating local regulations to allow for more efficient organics material composting and processing.

Greater organics collection and processing will improve county agricultural soils, help us reach 80% solid waste diversion by 2030, and make working lands more resilient to drought and wildfires.

DID YOU KNOW?

Recycling food creates compost, builds soil, and helps grow more food.

* 2017 data, 2018 data anticipated to be available in 2020 from CalRecycle.
Agriculture & Conservation & Water + Waste Water

The County reduces emissions from petroleum- and diesel-powered agricultural equipment and water use within County operations and residential and commercial development in the unincorporated county. In 2018, the San Diego Air Pollution Control District funded $1.2 million for farmers to replace agricultural equipment with low-emission engines. To reduce County water use, in 2018 the County followed strict water wise landscaping design in the planning for new facilities and implemented water reductions in outdoor landscaping in new private development. To understand the climate's impact on agriculture, the County partners with the University of California Cooperative Extension (UCCE) to conduct climate resilient agriculture research, education and outreach programming.

HABITAT RESTORATION & RAINWATER IRRIGATION

The Department of Parks and Recreation aims to plant 3,500 trees annually on County park land and 49,000 trees by 2030 to restore native habitat, store carbon in the soil, and build fire resistance. In 2018 alone, the County planted 8,269 trees.

Carbon Sequestration

Tree Planting

The County partnered with local high school students to help restore riparian habitat lost to the Cedar Fire. They planted over 2,000 trees including native oak, sycamore, cottonwood, and willow that will result in long-term carbon sequestration.

Rainwater Harvesting

Rain Barrels

In 2018, the County distributed all rain barrels to unincorporated county residents through an incentive program to reduce indirect electricity use from the extraction, transportation, and treatment of water. Look for a demonstration rain barrel at the Solana Center to learn how to save on irrigation costs, reduce stormwater runoff, and conserve a precious resource.

Water Conservation

Water Wise Landscaping

The new Borrego Springs Library, Park, and Sheriff’s office implemented sustainability practices such as water wise landscaping which follows a watershed approach by using native trees and shrubs, cacti, and boulders to hold and clean water and create habitat while requiring less irrigation. See the sustainable landscapes guide in Resources + Links to learn more.

DID YOU KNOW?

Native plants reduce water use by up to 60% by storing water in roots up to 14 feet long, compared to lawns whose roots are only inches deep.

Find more water and agriculture measures and progress at sandiegocounty.gov/sustainability

DID YOU KNOW?

Forests and natural lands absorb 18% of national greenhouse gas emissions.

DID YOU KNOW?

Native plants reduce water use by up to 60% by storing water in roots up to 14 feet long, compared to lawns whose roots are only inches deep.

Water & Energy Conservation

To achieve a 40% outdoor water use reduction from new and existing residential and non-residential development landscaping by 2020, the County is amending its ordinance to require water wise practices. Starting in 2020 the County will require installation of water-efficient appliances and plumbing fixtures in all new residential construction in accordance with CALGreen, California’s first green building code.

The County is also implementing practices to reduce potable water consumption by 15% at its facilities. Look for water efficiency and water wise landscaping design at new County facilities:

• San Ysidro Nature Center
• North Coastal Health & Human Services Agency Regional Center
• Assessor/Recorder/County Clerk East County
Climate Action Plan
RESOURCES + LINKS

BUILT ENVIRONMENT & TRANSPORTATION
- Purchase of Agricultural Easements (PACE): sandiegocounty.gov/pds/advance/pace
- Multiple Species Conservation Program (MSCP): sandiegocounty.gov/pds/mscp/
- County Hazard Mitigation Plan: sandiegocounty.gov/oes/emergency_management/bees_l_mitplan
- Local Coastal Program: sandiegocounty.gov/content/sdc/pds/advance/county-of-san-diego-local-coastal-program
- San Elijo Park: sdparks.org/content/sdparcs/en/park_pages/SanElijo

ENERGY
- LEED Platinum for Communities: usgbc.org/articles/four-new-leed-cities-and-communities-certify-ac07bf45
- LEED Gold for Ramona Library: courtnewscenter.com/ramona-library-so-green-its-gold/
- Alpine Library, Borrego Springs Library, 2018 NACO Award for ZNE Portfolio: living-future.org/
  lbc/case-studies/alpine-brANCH-library/
- SoISmart: sanmart.org/communities/san-diego-county-ca/

SOLID WASTE
- Strategic Plan to Reduce Waste: sandiegocounty.gov/dpw/recycling/plan
- DPW Recycling: sandiegocounty.gov/content/sdc/dpw/recycling
- Online Recycling Database: WasteFreeSD.org
- Live Well San Diego Food Donation Action Plan: livewellsd.org/content/dam/livewell/TipsAndToolsOrgs/Food-Donation-Action-Plan-for-the-San-Diego-Region.pdf
- DPW Food to Good to Waste: sandiegocounty.gov/content/sdc/dpw/recycling/Food

WATER & WASTE WATER
- Tree Planting: courtnewscenter.com/students-give-life-to-oak-oasis-county-preserve/
- Strategic Energy Progress Report: sandiegocounty.gov/content/dam/sdc/dgs/Doc/Energy2017-
  2018ProgressReport.pdf
- San Diego Sustainable Landscapes Guidelines: sandiegocounty.gov/content/sdc/dpw/
  watersheds/residential/San_Diego_Sustainable_Landscape_Guidelines

AGRICULTURE & CONSERVATION
- FARMER, CAPP Grant Programs: sdapcd.org/content/sdc/apcd/en/grants-and-incentives/carl-moyer-program

TAKING ACTION
What You Can Do

All individual and collective actions add up. Every person, every business, and every entity has a role to play in addressing climate change. Here are some simple things you can do at home, in your workplace, or in your community to make a difference. For more information visit our website and find links in the blue tiles below.

HOW YOU CAN CONTRIBUTE TO SUSTAINABLE AND THRIVING COMMUNITIES

- **Check out electric vehicle incentives**
- **Walk, bike, take transit or carpool!**
- **Participate in County tree planting and park events**
- **Install solar panels on your home or business**

- **Reduce waste by recycling and composting**
- **Add mulch or compost to your yard or garden**
- **Take advantage of rain barrel incentives**
- **Get involved in community plan updates**

- **Take shorter showers and turn off water!**
- **Eat a more plant-based diet and prevent wasted food**
- **Avoid single-use plastics and use eco-friendly products**
- **Use less energy. Turn off lights when not in use.**

Stay Connected

For updates, to view the digital Annual Monitoring Report, or to sign up for our e-newsletter visit:
sandiegocounty.gov/sustainability
COUNTY OF SAN DIEGO
Planning & Development Services
Climate Action Plan
sandiegocounty.gov/sustainability

Rain barrels, incentives, future efforts?
We want to hear from you and get you involved!
cap@sdcounty.ca.gov