

# 2015 Greenhouse Gas Inventory Update



## Overview

- Background – 2015 is a critical milestone
  - Climate action Timeline
- Countywide emissions
- Jurisdictional Data
- Next Actions

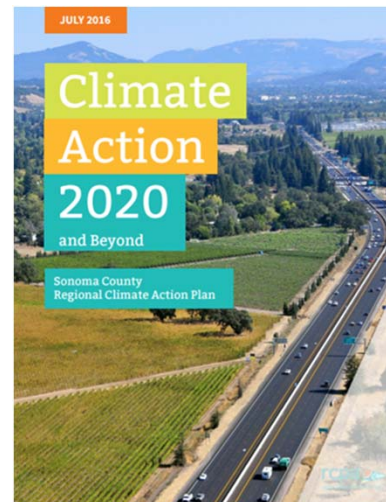


## Background

### Climate Action 2020 and Beyond

- Countywide Goals
  - 25% below 1990 levels by 2020
  - 40% below 1990 levels by 2030
  - 80% below 1990 levels by 2050

Align with state legislation



## Timeline

- Climate Action 2020 Adopted by this Board: July 2016
  - Baseline 2010 Inventory
- Lawsuit decision: September 2017
- RCPA Board adopts resolution reestablishing CA202 measures and goals: November 2017
  - All member jurisdictions, except for the County, have adopted a similar resolution
- Shift Plan Adopted: January 2018
- 2015 Greenhouse Gas Inventory Report Released: July 2018



## Emissions sectors:



Building Energy



Transportation and Land Use



Solid Waste



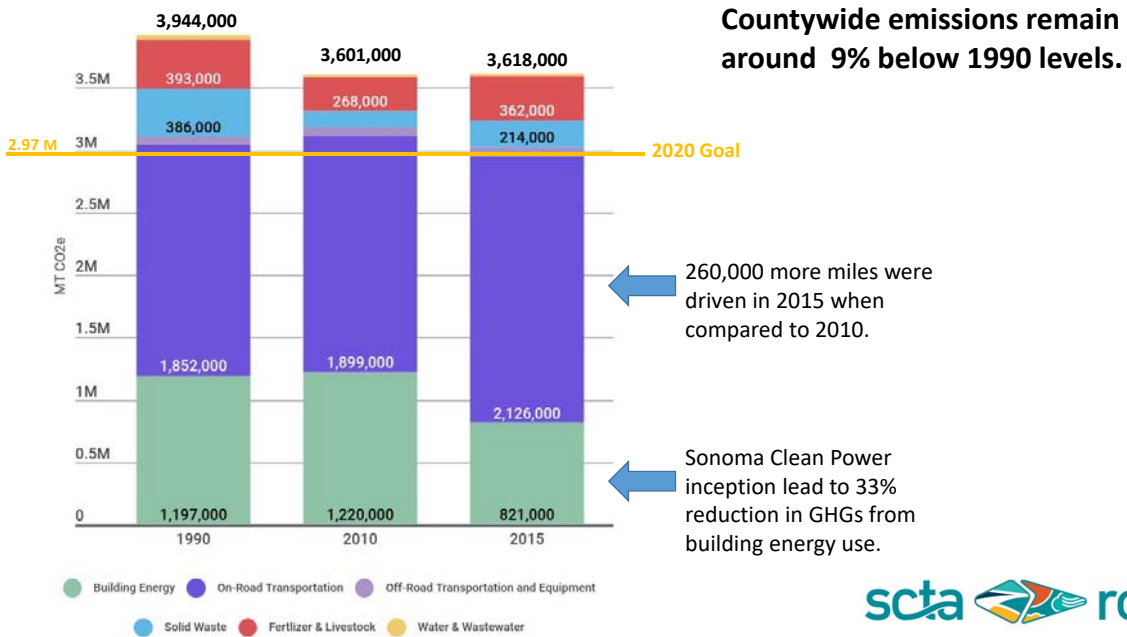
Water and Wastewater

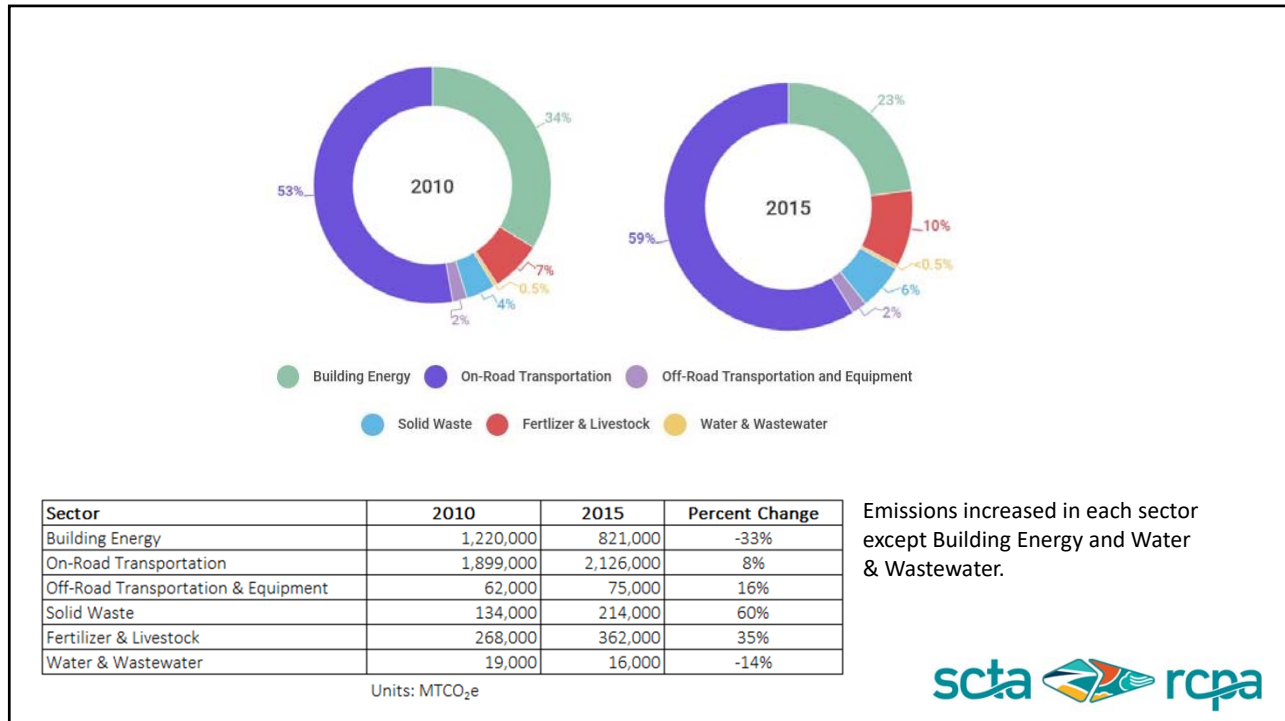


Livestock and Fertilizer



## Countywide Emissions





### Jurisdiction Details

	Emissions (MTCO <sub>2</sub> e)					
	Backcast	Inventory		CA2020 Business as Usual Forecasts		
	1990	2010	2015	2020	2040	2050
<i>Emissions by Jurisdiction</i>						
Cloverdale	57,000	59,000	63,800	73,300	93,200	93,800
Cotati	51,500	52,100	49,900	61,300	69,000	70,900
Healdsburg	93,500	108,800	116,800	121,000	123,700	121,100
Petaluma	387,000	441,900	445,900	545,000	580,900	588,600
Rohnert Park	291,300	264,300	263,700	372,700	371,800	378,600
Santa Rosa	1,123,100	1,065,200	1,002,800	1,396,900	1,844,700	2,027,500
Sebastopol	73,200	76,300	72,500	93,000	96,500	97,100
Sonoma City	96,900	103,400	105,400	122,200	132,500	131,200
Windsor	133,000	157,800	151,900	188,100	212,000	216,500
Unincorporated Sonoma County	1,244,300	1,004,500	983,300	1,128,800	1,205,600	1,218,300
<i>Emissions Not Assigned to Individual Communities</i>						
Fertilizer and Livestock	392,800	267,600	361,800	242,600	193,500	169,000
<b>Sonoma County Total</b>	<b>3,943,600</b>	<b>3,600,900</b>	<b>3,617,800</b>	<b>4,344,900</b>	<b>4,923,400</b>	<b>5,112,600</b>

Per Capita Emissions		
	2010	2015
Cloverdale	6.8	7.3
Cotati	7.2	6.8
Healdsburg	9.7	10.1
Petaluma	7.6	7.5
Rohnert Park	6.5	6.3
Santa Rosa	6.3	5.8
Sebastopol	10.3	9.6
Sonoma	9.7	9.7
Windsor	5.9	5.6
Unincorporated County	6.9	6.3



## Next Steps for RCPA

Actions	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2
Implementation Status Update	■	■							
Needs and Barriers Assessment		■	■						
Quick Wins!				■	■	■	■	■	■
2030 Goal Setting					■	■			
2030 Implementation Plans					■	■	■		
CA 2030 Update and 2018 GHG Inventory Release								■	
Implementation Support									■



Full report online at [rcpa.ca.gov/emissions](http://rcpa.ca.gov/emissions)

**JURISDICTION SUMMARIES**

Sonoma County continues progress towards the cleaner, more sustainable future codified in Climate Action 2020. Each jurisdiction's focus on climate action and commitment to the goals and measures outlined in the CA2020 demonstrates the collective recognition of the need to address climate change at the local and regional level. The following sections offer insight into the status of GHG emissions reductions in each community, focusing on the largest emissions source, transportation. As well as what can be done to move the region towards our short- and long-term goals given where emissions increased and the strengths of those communities.

**CLOVERDALE**

Greenhouse gas emissions in Cloverdale increased from 2010 to 2015. Communitywide emissions were 3% above 1990 levels in 2010; this percentage increased to 11% above 1990 levels in 2015. This increase is likely a result of community members driving longer distances each day. Annual vehicle miles traveled (VMT) within Cloverdale increased by almost 20 million annual miles between 2010 and 2015. This equates to a per capita daily VMT increased from 25 to 31 daily miles over this five year period.

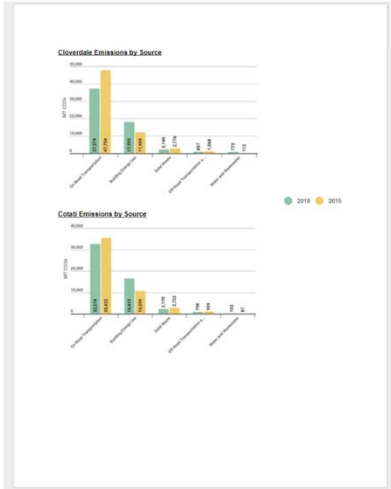
**GHG Inventory by Source**

2010

2015

● Building Energy Use  
 ● Water and Wastewater  
 ● Solid Waste  
 ● Off-Road Transportation and Equipment  
 ● On-Road Transportation

Cloverdale joined other Sonoma County communities in adopting a resolution reaffirming the city's goal to implement local, regional, and state greenhouse gas reduction measures included in Climate Action 2020. With guidance from the RCPA in coordination with its staff, Cloverdale is poised to implement the 13 transportation focused measures, section 5.1.4 of Climate Action



**Key Activity Data by GHG Source**

Source	Primary Emissions Source	Key Activity Data	Data Sources
Building Energy	Production of electricity (emissions generated at power plants); Contribution of natural gas	Power generation (management hours); Total natural gas use (same)	Electricity providers: PG&E, Westcoast Power; Sonoma Gas; Natural gas providers: PG&E
On-Road Transportation	Combustion of gasoline and diesel fuel in vehicles	Vehicle miles traveled (management and fuel); Quantity of four-wheeled vehicle fleet; 7-year pattern	Sonoma County Transportation Authority; California Resources Board (CARB); SONOMA2020 Model
Off-Road Transportation and Equipment	Combustion of fossil fuels in equipment (e.g., lawns, bulldozers, backhoes); Contribution of fossil fuels in off-road engines (e.g., tractors, boats, ATVs)	Fuel consumption in off-road vehicles and equipment; Socioeconomic data	ARIS OFFROAD - and OFFROAD2020 model
Solid Waste	Natural emissions from decomposition of material sent to landfill	Types of residential and commercial waste sent to landfill; Profile of waste material in each jurisdiction (e.g., 1% office paper, 25% food waste)	Sonoma County Waste Management Agency; CalRecycle
Wastewater Treatment	Emissions of methane and nitrous oxide from sludge stabilization treatment	Population served by each wastewater treatment plant (WWTTP); Amount of wastewater treatment at each WWTTP; Amount of digester gas produced at each WWTTP	Sonoma County Water Agency; Sanitation districts and jurisdictions that operate a WWTTP
Water Conveyance	Production of electricity associated with the pumping and movement of water from source to user	Water consumption; Water supply sources (e.g., groundwater); Sonoma County Water Agency	Water Management Plans for each jurisdiction; Sonoma County Water Agency
Livestock and Fertilizer	Emissions of nitrous oxide from the application of fertilizer; Emissions of methane and nitrous oxide from livestock and manure management	Acres and types of crops grown in the county; Livestock operations	Sonoma County Annual Crop Report; U.S. Dept. of Agriculture National Database



Questions?

