ENERGY AND CLIMATE ACTION PLAN 2017 PROGRESS REPORT

Presentation to the County of Santa Barbara Board of Supervisors

December 11, 2018

Sustainability Division
COUNTY OF SANTA BARBARA

Agenda

- County Sustainability Committee Introduction
- ECAP Overview
- ECAP Implementation Progress
- ECAP Implementation Highlights and Opportunities
- Looking Forward Recommendations
- Recommended Action

County Sustainability Committee

County Executive Office

- Matthew Pontes, Assistant County Executive Officer

Agricultural Commissioner / Weights & Measures

- Debbie Trupe, Deputy Commissioner

Community Services

- Ryder Bailey, Chief Financial Officer, Community Services
- George Chapjian, Director, Community Services
- Frank Chen, Program Specialist, Sustainability
- Jen Cregar, Co-Division Chief, Sustainability
- Jett Black-Mertz, Sr. Housing Specialist, Housing & Community Development
- Ashley Watkins, Co-Division Chief, Sustainability
- Vacant, Parks

General Services

- Skip Grey, Assistant Deputy Director

Planning and Development

- Selena Evilsizor, Planner, Long Range Planning

Public Health

- Vacant

Public Works

- Alan Nakashima, Sr. Program Specialist, Resource Recovery & Waste Management
- Brittany Heaton, Project Manager, Transportation
- John Karamitsos, Sr. Program Specialist, Water Agency

Partner Agencies

- Molly Pearson, Project Manager, Santa Barbara County Air Pollution Control District
- Andrew Orfila, Transportation Planner, Santa Barbara County Association of Governments

ECAP Overview

- Adopted in 2015; implementation began 2016
- Establishes goal to reduce community greenhouse gas (GHG) emissions to 15% below 2007 levels by 2020
  - **GHG** = carbon dioxide, methane, nitrous oxide and other pollutants that contribute to climate change; measured in $MTCO_2e$
- Identifies actions the County and community can take to reach 2020 goal
  - **Emissions Reduction Measure (ERM)** = individual action (53 total)
  - **Core Strategy** = category of similar ERMs (11 total)
- Focus is on unregulated emissions in the unincorporated county; ERMs are mostly voluntary
- Allows streamlined project-level environmental review through 2020

ECAP Implementation Progress Monitoring

- Measured in two ways:
  - GHG emissions ($MTCO_2e$)
    - CY2016 is the most recent year for which complete data is available
  - ERMs (% change from 2016; % of 2020 target)
    - CY2017 is the most recent year for which complete data is available
- Improvement over prior year measurement methods

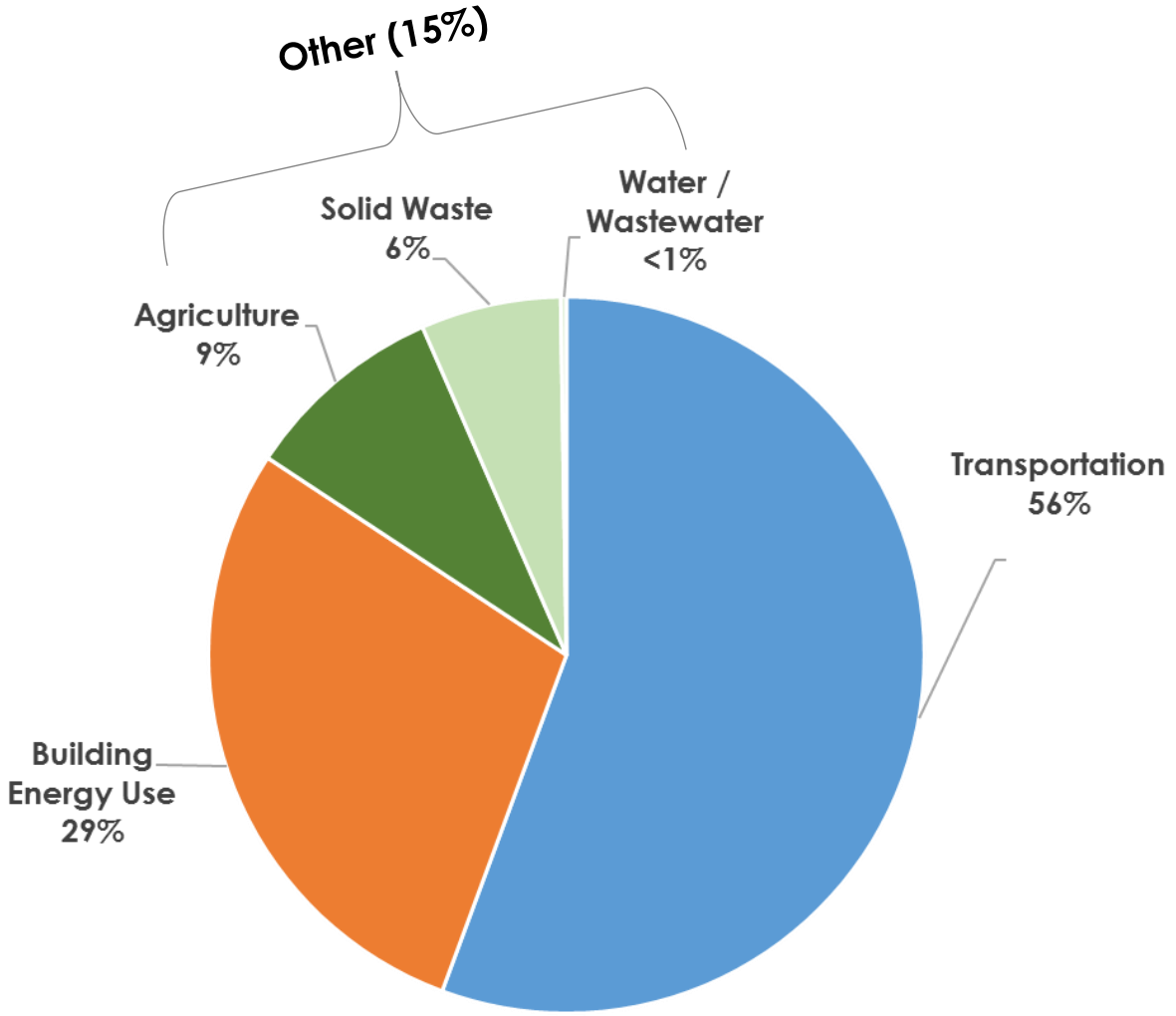
ECAP Implementation Progress: GHG Emissions

Source	GHG Emissions ($MTCO_2e$) 2007	2016	Difference $MTCO_2e$	Percent	Primary Reason for Change
Transportation	523,430	588,246	↑ 64,816	↑ 12%	Increased vehicle miles traveled, partially offset by decreased emissions rates
Building Energy	330,370	374,164	↑ 43,794	↑ 13%	Increased non-residential natural gas use
Off-Road	102,140	138,950	↑ 36,810	↑ 36%	Increased construction activity
Agriculture	90,348	119,360	↑ 29,012	↑ 32%	Increased fertilizer use, partially offset by decreased livestock population
Solid Waste	91,920	82,750	↓ 9,170	↓ 10%	Reduced landfill waste tonnage
Water and Wastewater	4,699	3,364	↓ 1,335	↓ 28%	2007 inventory double counted wastewater treatment electricity use and water pumping
TOTAL	**1,142,907**	**1,306,833**	**↑ 163,926**	**↑ 14%**	

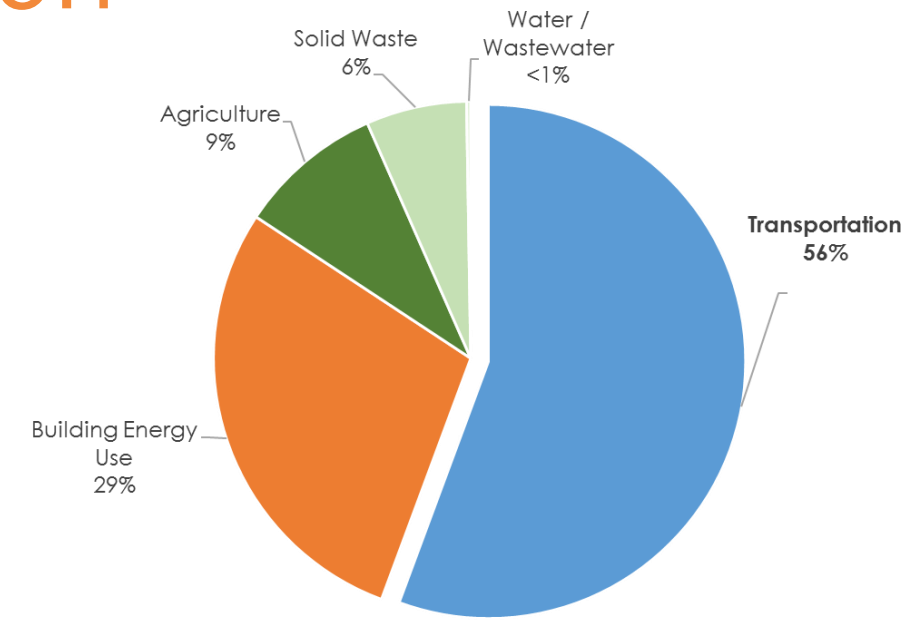
ECAP Implementation Progress: ERMs

- We're not likely to reach the 2020 GHG reduction goal without further action.

Unincorporated County GHG Emissions by Source



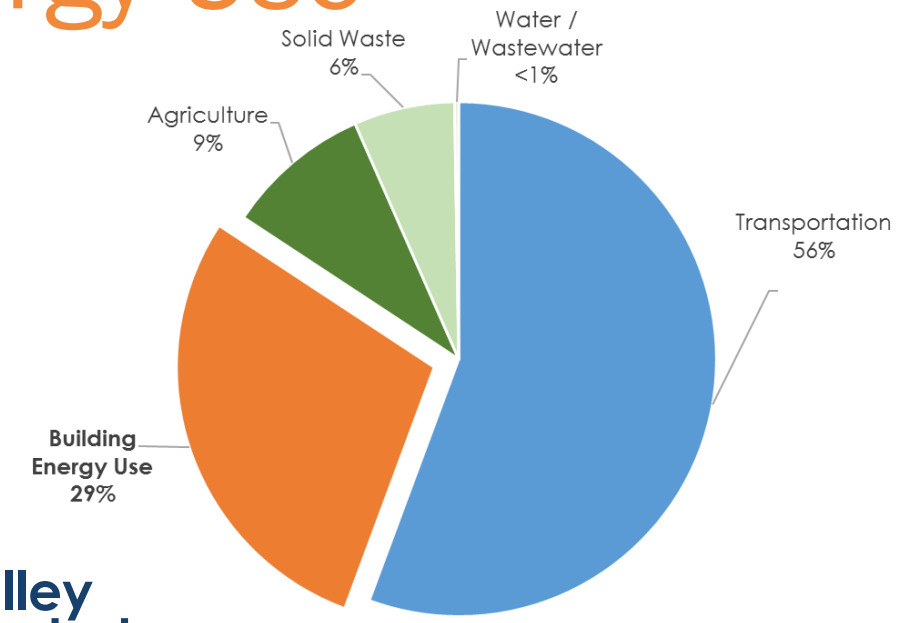
ECAP Implementation Highlights and Opportunities: Transportation



- Highlights:
  - Rail ridership up
  - Students using active transportation
  - Seeing uptick in infill development
  - Slight declines in County fleet fuel use
- Opportunities:
  - Address housing-jobs imbalance
  - Increase funding for active transportation and shared mobility projects
  - Encourage electric vehicle adoption
  - Strengthen County fleet procurement goals and requirements
  - Enhance employee commuter benefits

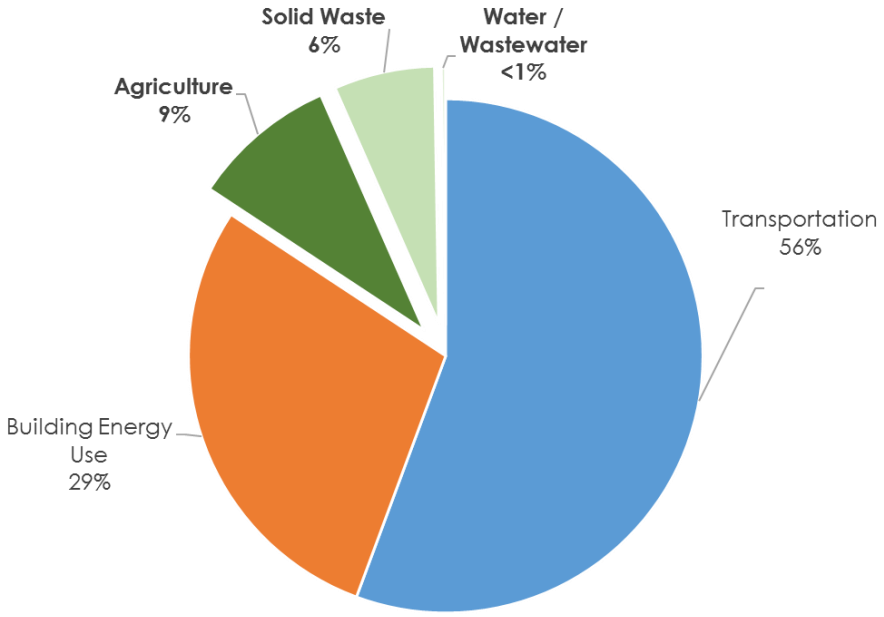
ECAP Implementation Highlights and Opportunities: Building Energy Use

- Highlights
  - Reaching residents with energy efficiency information
  - Rooftop solar and Cuyama Solar Project exceeded renewable energy goals
- Opportunities
  - **Full build out of solar potential in Cuyama Valley Rural Area = ~14% of total GHG reduction needed**
  - Strategic Energy Planning
  - Tri-County Regional Energy Network (3C-REN)
  - Commercial energy benchmarking and auditing
  - Building electrification
  - County campus energy master plans

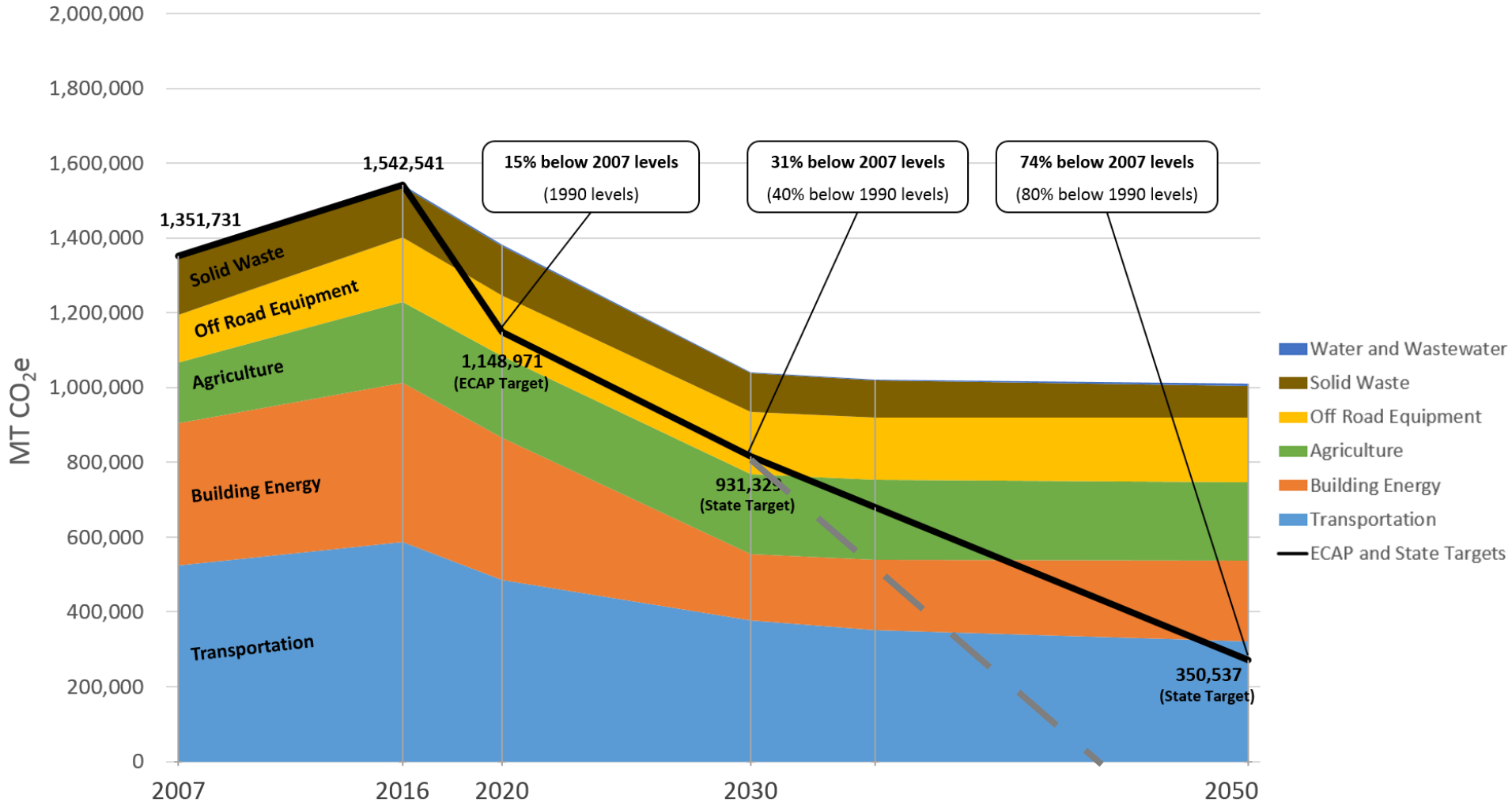


ECAP Implementation Highlights and Opportunities: Other

- Highlights
  - Agriculture: Growers using water-efficient irrigation
  - Waste: Diverting more waste from landfill
  - Water/Wastewater: Annual water savings on track for 2020 goals
- Opportunities
  - Agriculture: Carbon farming, increased agricultural equipment replacement
  - Waste: **Tajiguas Resource Recovery Project = ~62% of total GHG reduction needed**, improved sorting for County facilities
  - Water/Wastewater: Parks Water Management Plan, demonstration gardens



Looking Forward: Post-2020 Goal Setting



Looking Forward: Plan Updates

Staff recommends that the ECAP be updated to:

- **Establish a new 2030 GHG reduction target.**
  - 40% below 1990 levels ≈ 31% below 2007 levels
- **Include GHG reduction and climate resiliency actions.**
  - Ex: Solar to reduce GHG emissions + battery to provide grid backup
  - Ex: Bike lanes to reduce GHG emissions + cool pavements to extend life
  - Ex: Compost to reduce GHG emissions + retain moisture and build soil health
- **Employ a regional approach inclusive of interested neighboring jurisdictions and community representatives.**
  - At a minimum, agree to shared vision and reporting. Individual jurisdictions may adopt their own implementation strategies.
- **Report implementation progress on a three-year cycle.**
  - 2021: Final report on current ECAP for progress through 2020
  - 2024: 1st report on 2030 GHG reduction target progress through 2023

Recommended Action

A. Receive and file ECAP 2017 Progress Report and 2016 GHG Inventory Update and Forecast

B. Provide staff with direction regarding updating the ECAP to:

   1. Establish a new 2030 GHG reduction target;
   2. Include GHG reduction and climate resiliency actions;
   3. Employ a regional approach inclusive of interested neighboring jurisdictions and community representatives;
   4. Report implementation progress for the current and updated ECAP on a three-year cycle; and
   5. Other direction provided by the Board.

QUESTIONS?