

BOARD OF SUPERVISORS AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors

105 E. Anapamu Street, Suite 407 Santa Barbara, CA 93101 (805) 568-2240

Department Name: Community Services

Department

Department No.: 057

For Agenda Of: December 11, 2018

Placement: Departmental Estimated Time: 30 minutes

TO: Board of Supervisors

FROM: Department George Chapjian, Community Services Director

Director(s) (805) 568-2467

Contact Info: Jennifer Cregar, Co-Division Chief, Sustainability

(805) 568-3506

SUBJECT: Energy and Climate Action Plan 2017 Progress Report

County Counsel Concurrence

Auditor-Controller Concurrence

As to form: Yes As to form: Yes

Other Concurrence: Risk Management

As to form: Yes

Recommended Actions:

That the Board of Supervisors:

- A. Receive and file the Energy and Climate Action Plan (ECAP) 2017 Progress Report (Attachment A) and 2016 Greenhouse Gas Inventory Update and Forecast (Attachment B);
- B. Provide staff with direction regarding updating the ECAP to:
 - 1. Establish a new 2030 greenhouse gas (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;

C. Determine that the recommended actions do not constitute a project and are exempt from the California Environmental Quality Act (CEQA) pursuant to the CEQA Guidelines Section 15378(b)(2), as they involve continuing administrative actions. When projects and programs proceed to implementation, they may be subject to environmental review under CEQA. There is an existing Final Environmental Impact Report (Case No. 14EIR-00000-00003; available at https://bit.ly/2yXLEI0) for the ECAP that was certified by the Board on May 19, 2015.

Summary Text:

In response to "Santa Barbara County Climate Change Principles" (Resolution 09-059), the Board of Supervisors ("Board") adopted the County of Santa Barbara Energy and Climate Action Plan (ECAP) in May 2015. The ECAP established a goal of reducing greenhouse gas (GHG) emissions in the unincorporated county by 15 percent below 2007 levels by 2020 and identified 53 emissions reduction measures (ERMs) to achieve this goal.

The ECAP 2017 Progress Report is the second report detailing the County's progress towards reaching its 2020 emissions reduction goal. This report documents the progress of implementing the ECAP in two ways:

- 1. Changes in GHG emissions created by activities in the unincorporated parts of the county since the 2007 baseline year. **Current (2016) status: GHG emissions are 14 percent above 2007 levels.** This increase is largely attributed to increased driving and construction activity, increased natural gas use in non-residential buildings, and increased agricultural fertilizer use.
- 2. Changes in implementation of ERMs (e.g., number of bike lanes installed, number of homes with energy efficiency upgrades) by the County and its community partners since 2007. Current (2017) status: 50 percent of ERMs are on track (at least 50 percent to 2020 goal).

Since the ECAP was adopted, the State has codified goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. Governor Brown has also issued Executive Order B-55-18 calling for carbon neutrality by 2045. Achieving the County ECAP's current 2020 GHG emissions reduction target and pursuing the even deeper reductions called for by the State require an all-hands approach from the unincorporated community and neighboring jurisdictions. Staff recommends an inclusive, multi-jurisdictional approach to updating and implementing the ECAP that empowers the community to be part of the solution to addressing climate change.

The four recommendations for updating the ECAP to meet the climate action commitment that the Board made in adopting the ECAP and helping Santa Barbara County adapt to climate change are:

- 1. Establish a New 2030 GHG Reduction Target
- 2. Integrate GHG Reduction and Climate Resiliency Actions
- 3. Employ a Regional Approach
- 4. Report Implementation Progress on a Three-Year Cycle

Staff is requesting that the Board receive and file the ECAP 2017 Progress Report, which includes the 2016 GHG Inventory Update and Forecast as an appendix, and provide direction regarding future climate action planning and reporting.

Background:

History of Climate Action by the County of Santa Barbara

In Santa Barbara County, as elsewhere in California and globally, climate change challenges our status quo and contributes to a growing number of economic, social, and environmental problems. In recognition of these challenges and State-level policy direction, the Board adopted in March 2009 the "Santa Barbara County Climate Change Guiding Principles" (Resolution 09-059; available at https://bit.ly/2JgDjUy). The Guiding Principles led to the development and Board adoption of the ECAP (available at https://www.countyofsb.org/csd/asset.c/173) in May 2015.

The ECAP established a goal of reducing GHG emissions in the unincorporated parts of the county to 15 percent below 2007 levels by 2020 and identified 53 ERMs to achieve this goal. Examples of ERMs include: installing bike lanes to encourage active GHG-free transportation; retrofitting buildings to be more energy-efficient; and keeping trash out of the landfill through reducing consumption, recycling, and composting.

More information about the ECAP is available at http://www.countyofsb.org/sustainability/ecap/.

ECAP Implementation Progress through 2017

The 2017 ECAP Progress Report (Attachment A) is the second report detailing the County's progress towards reaching its 2020 emissions reduction goal. The report documents the progress of implementing the ECAP in two ways:

- 1. Changes in GHG emissions created by activities in the unincorporated parts of the county since the 2007 baseline year (see "GHG Emissions Reduction Progress")
- 2. Changes in implementation of ERMs by the County and its community partners since 2007 (see "ECAP Emissions Reduction Measure Progress")

The 2017 ECAP Progress Report provides greater accuracy and begins to address some of the data gaps identified in the 2016 report (available at http://www.countyofsb.org/csd/asset.c/217).

GHG Emissions Reduction Progress

In June 2018, Ascent Environmental, Inc. updated the unincorporated county's GHG emissions inventory for 2016 to provide a snapshot of how the County and the community are doing in lowering emissions towards the County's 2020 emissions reduction target. As shown in Table 1, GHG emissions from the unincorporated parts of the county increased by 14 percent from 2007 to 2016. This increase is largely attributed to increased driving and construction activity, increased natural gas use in non-residential buildings, and increased agricultural fertilizer use. Because of the emissions increase, the County and community need to reduce emissions by 26 percent from 2016 levels to reach the ECAP's 2020 target of 15 percent below 2007 levels.

¹ For further discussion of the impacts of climate change, please visit the Intergovernmental Panel on Climate Change's Special Report on Global Warming of 1.5°C, the Fourth National Climate Assessment, and California's Fourth Climate Change Assessment.

Table 1. Normalized Comparison of 2007 and 2016 Unincorporated County GHG Emissions

	GHG Emissions (MTCO ₂ e)		Difference		
Source	2007	2016	MTCO ₂ e	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	1 43,794	13%	Increased non-residential natural gas use
Off-Road	102,140	138,950	1 36,810	↑ 36%	Increased construction activity
Agriculture	90,348	119,360	1 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 Emissions Reduction Measure Progress

Despite some notable highlights, the County and community are behind in implementing many of the ECAP's ERMs. Of the 36 ERMs that can be measured, 18 ERMs (50%) are on track to reach their 2020 implementation target, meaning they are at least 50 percent towards reaching the 2020 goal. Attachment A includes details on the implementation progress of each of the measurable ERMs. Many ERMs need additional attention and funding from the County to help reach the 2020 reduction target of 15 percent below 2007 levels. Other ERMs rely on community members and organizations to realize their full GHG reduction potential.

Looking Forward: Staff Recommendations for Updating the ECAP

As noted in the ECAP, "Attainment and exceedance of the reduction target will require a continued commitment from the County to monitor progress and make plan updates when needed, continued implementation of federal and state mandates, and dedicated residents choosing to take individual actions to be a part of the solution." In addition, the ECAP meets specific CEQA requirements that allow for projects that conform to the ECAP's EIR (see https://bit.ly/2yXLEIO) to conduct a more streamlined environmental review known as "tiering." This tiering ability is only valid through the ECAP timeframe of 2020.

In light of the State's more aggressive GHG reduction goals, the County's increasing emissions trend, the CEQA streamlining authority expiring in 2020, and localized effects of climate change already being felt, an update to the ECAP is needed to ensure a low-carbon and climate-resilient Santa Barbara County.

Staff has identified four recommendations for updating the ECAP to meet the climate action commitment that the Board made in adopting the ECAP and helping Santa Barbara County adapt to the effects of climate change already being felt.

Recommendation 1: Establish a New 2030 GHG Reduction Target

The State is continuing to spur deeper GHG reductions in line with targets needed to avoid the worst impacts of climate change. Since the ECAP was adopted, the State has codified goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.² Figure 1 outlines future anticipated GHG emissions from the unincorporated county (represented by the stacked colored bands) and identifies the additional emissions reductions that must be achieved to meet the current ECAP 2020 goal and align with these new State mandates (represented by the bold black line).

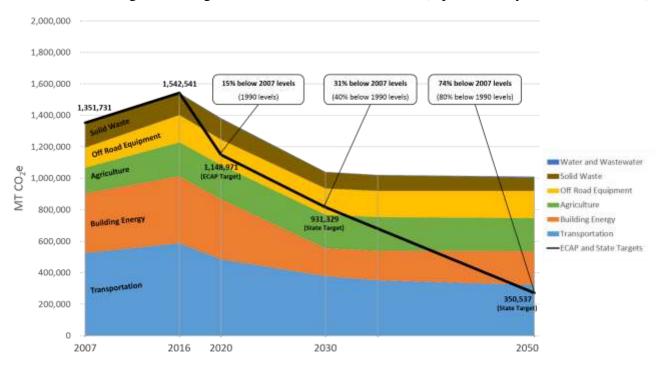


Figure 1. Unincorporated County GHG Emissions with ECAP and State Targets, 2007-2050

Table 2 shows the unincorporated county's emissions trajectory versus the ECAP and State targets, representing the emissions gap that the County and community could address through local action.

Table 2. Unincorporated County Expected GHG Emissions vs. ECAP and State Targets

Year	Expected GHG Emissions	GHG Emissions Target
2020	2% below 2007 levels	15% below 2007 levels
2030	23% below 2007 levels	31% below 2007 levels
2050	25% below 2007 levels	74% below 2007 levels

² Governor Brown issued EO B-55-18 in September 2018, establishing a new target to be completely carbon neutral, i.e., GHG reductions equal or exceed GHG emissions, by 2045. However, the carbon neutral goal has not been codified, nor has the State provided guidance to local governments on how to align with this target. Therefore, the 2045 target is not included.

In light of the significant GHG reductions needed to reach the 2020 target and the difficulties of planning on a multi-decadal horizon, **staff recommends aligning with the State's 2030 GHG reduction goal of 40% below 1990 levels, or roughly 31% below 2007 levels.** The ECAP could continue to be updated for post-2030 State goals.

Recommendation 2: Integrate GHG Reduction and Climate Resiliency Actions

Some GHG-causing activities are likely to worsen as the climate changes further, causing a cyclical effect. For example, wildfires—which emit large amounts of GHGs through the combustion of vegetation and fuels used to power fire-fighting equipment—are expected to continue increasing in frequency and intensity. Farmers may continue using larger amounts of fertilizers as a supplement to decreased soil moisture resulting from sustained drought, and drought-induced erosion may release carbon held in the soil to the atmosphere. Electricity use may rise due to increased air conditioning use as the county experiences more hot days. In addition to the increased emissions from these climate-driven behaviors, these activities can also present health risks, negatively impact the economy, and impair air quality. The County and community need to anticipate and plan for these and other consequences of climate change, while continuing implementation of ERMs that lower GHG emissions. For this reason, staff recommends incorporating climate resiliency actions with existing and new GHG reduction measures, some of which will be more effective if required, rather than encouraged.

Recommendation 3: Employ a Regional Approach

Achieving the ECAP's current 2020 GHG emissions reduction target and pursuing the even deeper reductions called for by the State require an all-hands approach from the unincorporated community and neighboring jurisdictions. The accelerating pace of climate change—including rising temperatures and more severe, prolonged drought punctuated by more intense bouts of rain—and the magnitude of the impacts climate change causes necessitates individual behavior change and societal-scale culture change.

Furthermore, climate change and the GHGs that cause it don't recognize jurisdictional boundaries. Most GHG reduction measures and many climate resiliency activities are similar across local governments and other organizations, enabling economies of scale to be realized through collaboration. What's more, one jurisdiction's response to climate change can affect neighboring jurisdictions. For example, sea walls can exacerbate coastal flooding and erosion down-coast, and persistent emergency evacuations can strain nearby communities' housing and transportation systems. Collaboration can, therefore, ameliorate these unintended consequences while stretching limited resources and minimizing duplication of effort. For these reasons, **staff recommends an inclusive, multi-jurisdictional approach to updating the ECAP that empowers the community to be part of the solution to addressing climate change.** Staff from the Sustainability Division and Long Range Planning would coordinate on this collaborative approach, with Long Range Planning focusing on land use development-related measures, and the Sustainability Division leading the overall community development of the new ECAP.

Recommendation 4: Report Implementation Progress on a Three-Year Cycle

The ECAP calls for an *annual* monitoring and reporting process. The Energy Element of the Comprehensive Plan (see https://bit.ly/2EL6lgz), in contrast, commits the County to monitor progress *every five years* and update the ECAP as needed if the County is not achieving its GHG emissions reduction target. The budget allocated to the Sustainability Division is sufficient to monitor and report on the County's progress. However, the process is time-consuming and leaves limited funding for ERM implementation. Although desirable, few local governments report on an annual basis due to the

resource-intensive nature of data collection and reporting. Reporting on a three- to five-year timeline is more common; **staff recommends a three-year reporting cycle.**

Performance Measure:

N/A

Contract Renewals and Performance Outcomes:

N/A

Fiscal and Facilities Impacts:

Funds have previously been appropriated for the ECAP development and some implementation, monitoring, and reporting activities. No additional FY18/19 funding is requested at this time.

Fiscal Analysis:

No additional FY18/19 funding is requested at this time.

Key Contract Risks:

N/A

Staffing Impacts:

None.

Special Instructions:

Please send one copy of the minute order to Jennifer Cregar.

Attachments:

Attachment A: ECAP 2017 Progress Report

Attachment B: 2016 GHG Inventory Update and Forecast

Authored by:

Jennifer Cregar, Co-Division Chief, Sustainability