

# PIEDMONT CLIMATE ACTION PLAN TASK FORCE

Meeting #1 - Thursday, March 30<sup>th</sup>, 2017

Options for Setting a 2030 Greenhouse Gas Emissions Reduction Target

## 1. BACKGROUND

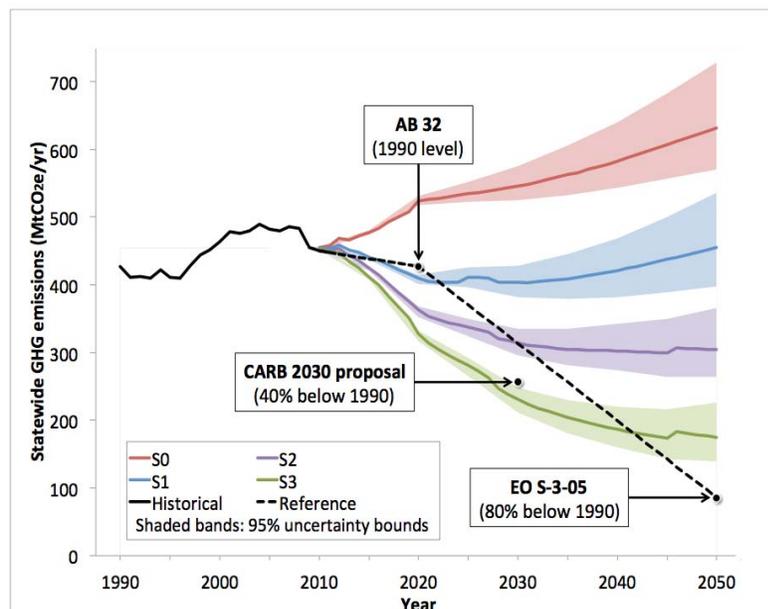
The Climate Action Plan Update will provide Piedmont with a strategy to continue its climate change mitigation work through 2030. The 2030 GHG reduction target is an essential element of the plan and setting the 2030 target is the first task of this committee. This handout will provide an overview of California's GHG reduction targets, Piedmont's existing goals and emissions, and reduction target options.

To prepare for the first Task Force meeting, please review the different options for Piedmont and be prepared to choose one at the upcoming meeting. Or, if you would prefer another strategy for setting a reduction target please come prepared to explain your alternative.

“As California continues to build its climate policy framework, there is a need for local government climate action planning to adopt mid-term and long-term reduction targets that are consistent with scientific assessments and the statewide goal of reducing emissions 80% below 1990 levels by 2050. Local government reduction targets should chart a reduction trajectory that is consistent with, or exceeds, the trajectory created by statewide goals.<sup>1</sup>”

### A. California State Goals:

- AB 32 requires emissions to be reduced to 1990 levels by 2020, a 15% reduction below the business-as-usual scenario.
- Executive Order S-3-05 sets a greenhouse gas emissions reduction target of 80% below 1990 levels by the year 2050.
- Executive Order B-30-15 sets an intermediary target of 40% below 1990 levels by 2030
- These targets are represented in the adjacent graph (S1 includes committed policies, S2 includes existing policies *and* targets, S3 includes speculative policies, S0 disables all existing policies).



From: Jeffery Greenblatt. "Modeling California policy impacts on greenhouse gas emissions." *Energy Policy*. 2015.

<sup>1</sup> <https://www.arb.ca.gov/cc/localgovernment/localgovernment.htm>

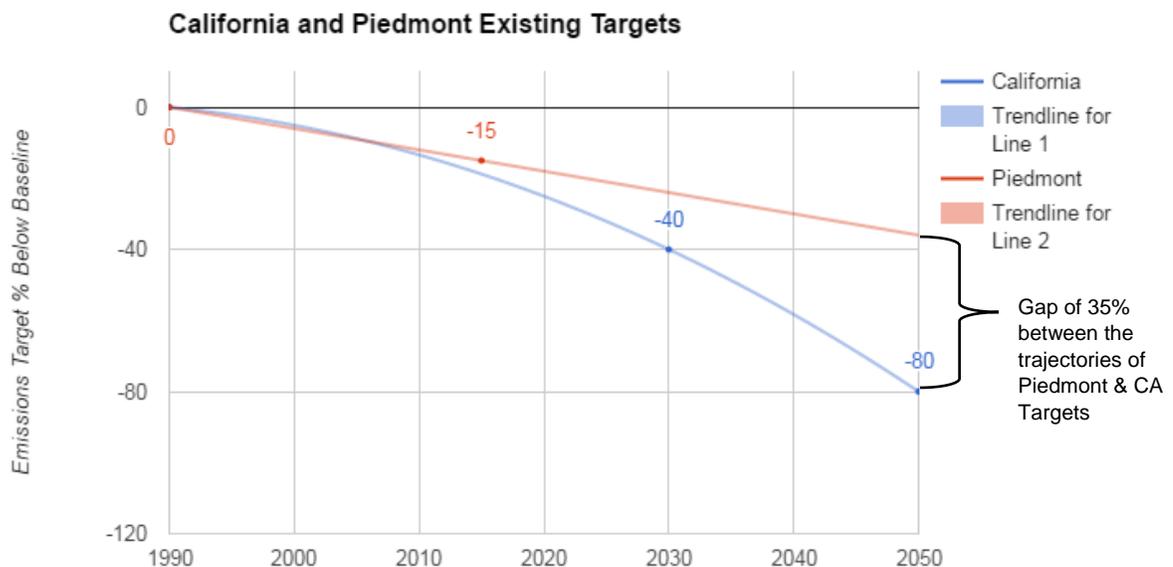
## B. Piedmont's GHG Targets:

Piedmont current Climate Action Plan, adopted in 2010, sets a 2020 GHG emissions reduction goal of 15% below 2005 levels and outlines measures and policies to achieve that reduction. Staff has presented periodic updates on the implementation of Climate Action Plan and Environmental Task Force measures to the City Council, most recently in July 2016. Staff has compiled three additional GHG inventories in 2010, 2014, and 2015 in order to track Piedmont's progress towards meeting its goal.

Piedmont's GHG reduction progress:

- 2010: 7% below 2005 levels
- 2014: 18% below 2005 levels
- 2015: 19% below 2005 levels

In both 2014 and 2015, Piedmont exceeded its 2020 emissions target. The majority of Piedmont's GHG reductions to-date have been the result of decreased natural gas usage, which is correlated to the warmer winters observed in 2014 and 2015.



## 2. EMISSIONS REDUCTION OPTIONS

Piedmont has several options for setting an updated GHG emissions reduction target. Below is a summary of several different methodologies for selecting a target, all of which arrive at a target around 40% to 50% below 2005 levels. An ideal 2030 target and/or a 2050 target should be ambitious in that it requires deviation from business as usual, but still remain achievable, as well as complement the state's goals.

### A. Continue to use 2005 as emissions baseline and apply state targets, unadjusted:

- a. By 2030, reduce emissions 40% from 2005 baseline
- b. By 2050 reduce emissions 80% from 2005 baseline

### B. Adjust for 1990-2005 Difference of 11%:

The state emissions baseline is 1990, while Piedmont's emissions baseline is 2005. CA state emissions in 1990 were lower than in 2005. Emissions rose from 1990, peaked in 2004, and began to drop. Therefore, meeting emissions reduction goals based on a 1990 baseline are more rigorous than meeting emissions reductions from a 2005 baseline. Piedmont could set a target

that compensates for the 11% difference between 1990 and 2005 emissions to be consistent with the state. Since we do not know what Piedmont's 1990 emissions were, it is possible that Piedmont's emissions were more stable between 1990 and 2005 (no significant growth in population or housing stock). If this is true, then setting a 2030 goal adjusting for 1990 could result in a more ambitious target than is realistic in Piedmont.

- a. By 2030, reduce emissions 50% below 2005 baseline
- b. By 2050, reduce emissions 90% below 2005 baseline

**C. Create a per capita emissions reduction target:**

The California Air Resources Board's (CARB) 2017 Scoping Plan Update recommends that local governments switch to per capita GHG emissions. Their plan aims for no more than 6 metric tons per capita by 2030 and no more than 2 metric tons per capita by 2050. Governor Brown signed an agreement called the "Under 2 MOU" to set a target of emitting less than 2 metric tons of CO<sub>2</sub> per capita by 2050<sup>2</sup>. Statewide, this per capita goal correlates to meeting the 80% reduction by 2050. However, it should be noted that Piedmont is already at approximately 3 metric tons per capita using the emissions from the 2015 GHG emissions inventory.

**D. Other target not listed:**

Piedmont could create another target based on scientific modeling, desired emissions reductions, etc.

**3. HOW WILL WE DO IT?**

**A. County and State Action:**

California is implementing a plan to reduce emissions 40% below 1990 levels by 2030 and 80% by 2050. This includes fuel efficiency standards, efforts to increase renewable energy, double the energy efficiency of buildings, and reduce the use of short-lived GHGs.<sup>3</sup> All of these statewide actions will aid Piedmont in meeting its own goals. The newly created East Bay Community Choice Energy will provide options for renewable electricity. BAAQMD is implementing its own regional plan, "Spare the Air, Cool the Climate" to reduce emissions.

Governor's Pillars to meet 2030 and 2050 GHG reduction goals:

- 50% reduction in petroleum use in vehicles
- 50% renewable electricity
- Double energy efficiency savings
- Carbon sequestration
- Reduce short lived pollutants

**B. Piedmont Action:**

While Piedmont's emissions can fluctuate, if the current rate of emissions reductions per year remains steady (approximately 2% decrease per year), Piedmont would be just shy of 50% below 2005 levels by 2030. However, it is likely that "low-hanging fruit" and outside factors (i.e. increased winter temperatures, PG&E's energy mix, state mandated vehicle fuel efficiency, etc.) are likely the largest contributors to Piedmont's reductions so far. Therefore it is unlikely that Piedmont will reach its goals without further action by the municipality, houses of worship, businesses, public and private schools, and residents. The 2030 Climate Action Plan update will provide a framework for continued government and community interventions by which Piedmont is able to meet its goals.

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<sup>2</sup> <https://www.gov.ca.gov/news.php?id=18964>

<sup>3</sup> <https://www.arb.ca.gov/cc/localgovernment/localgovernment.htm>

# Projected CO2e Values With Reductions Applied

