



DATE: July 16, 2018

TO: Council Sustainability Committee

FROM: Director of Utilities & Environmental Services

SUBJECT: Establishing a 2030 GHG Reduction Goal

RECOMMENDATION

That the Committee reviews and comments on this report and makes a recommendation to Council to adopt a resolution setting Hayward's 2030 GHG reduction target at 40% below 2005 levels.

SUMMARY

Hayward currently has goals for reducing greenhouse gas (GHG) emissions with specific targets for 2020, 2040, and 2050. This report provides considerations for establishing a GHG reduction goal for 2030.

BACKGROUND

Hayward's original Climate Action Plan, adopted in 2009, included the following goals for reducing GHG emissions in both the community and in municipal operations:

- 6% below 2005 levels by 2013
- 12.5% below 2005 levels by 2020
- 82.5% below 2005 levels by 2050

When the CAP was incorporated into the General Plan in 2014, the following goals for both the community and in municipal operations were included:

- reduce emissions by 20% below 2005 baseline levels by 2020
- strive to reduce emissions by 61.7% by 2040
- strive to reduce emissions 82.5% by 2050

The City's goals were established to mirror those identified in the California Global Warming Solutions Act of 2006 (AB 32), which set a statewide GHG emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and the Governor's Executive Order # S-03-05, which set a target of 80% reduction by

2050. The goal for 2040 appears to be simply based on interpolating between the actual emission reductions in 2013 and the established 2050 goal.

Staff presented the City's 2015 GHG inventory Committee on September 11, 2017, and noted that achievement of the 2020 reduction goal will depend on East Bay Community Energy and Hayward enrollment levels. The fact that Council chose Brilliant 100, the 100% carbon free product, as the default for Hayward customers, makes it possible that Hayward will achieve the 20% reduction by 2020. The report also discussed the actions that would be necessary to achieve the 2040 goal. The Committee suggested that a goal for 2030 be established to guide the City's efforts over the next decade.

DISCUSSION

To provide the Committee with some context, staff reviewed the 2030 goals recently adopted by the State of California and the City of Oakland. Both entities undertook substantial efforts to ensure that the targets are aspirational yet achievable.

State of California Scoping Plan – SB 32 (Pavley) became law in 2016 and codified the goal to reduce statewide GHG emissions to at least 40% below 1990 levels no later than December 31, 2030. The Scoping Plan, approved by the California Air Resources Board in December 2017 lays out the plan for achieving the 2030 target. The Scoping Plan recommends that local governments adopt targets of no more than six metric tons CO₂e¹ per capita by 2030 and no more than two metric tons CO₂e per capita by 2050. The State also recommends that “local governments should be aiming for more robust reductions in later years. This is due to the phase-in of more significant land use policies and the associated emissions benefits that will be achieved by more efficient circulation patterns and resource use.”

Using the State's recommendation of no more than six metric tons CO₂e per capita by 2030 would not result in emissions reductions for Hayward. In 2015, Hayward's per capita emissions were 6.63 metric tons CO₂e. Based on population projections, Hayward's emissions could increase and still meet the recommended goal.

City of Oakland – The City of Oakland City Council recently adopted a goal to reduce GHG by 56% below 2005 levels by 2030. Oakland's previously established targets of 36% by 2020 and 83% by 2050. From 2005 to 2015, Oakland reduced emissions by 16.4%. Oakland staff recently completed work with Bloomberg Associates to evaluate the most cost-effective methods for the city to achieve its GHG reduction targets. Bloomberg Associates used a climate action planning tool called CURB and concluded that to meet its 2050 goal, Oakland must:

1. Shift to 100% carbon-free energy
2. Eliminate fossil fuels from building heating systems

¹ CO₂e is “carbon dioxide equivalent”. According to the California Air Resources Board, CO₂e is defined as: A metric used to compare emissions of various greenhouse gases. It is the mass of carbon dioxide that would produce the same estimated radiative forcing as a given mass of another greenhouse gas. Carbon dioxide equivalents are computed by multiplying the mass of the gas emitted by its global warming potential.

3. Improve building insulation and windows
4. Significantly shift people away from private auto trips
5. Accelerate the electrification of vehicles

To accomplish the above, the analysis identified near and long-term actions:

Near to Mid-Term Actions (2020-2030):

- Update codes for new buildings to eliminate gas heating systems by 2030
- Accelerate the electrification of space heating systems and dramatically improve building envelopes in existing buildings
- Increase mass transit options and coverage
- Continue to build out pedestrian and bike infrastructure.
- Accelerate the electrification of private vehicles and low capacity taxi/TNC vehicles

Long-Term Actions (2030-2050):

- Eliminate fossil fuel use in all buildings
- Continue to support large investments in transit
- Prioritize low carbon modes of transportation in infrastructure investments
- Ensure the electrification of shared mobility vehicles

Other Jurisdictions in Alameda County – Most cities in Alameda County have either adopted or are considering 2030 targets of 40% below baseline.

	Baseline Year	2020 Target "below baseline"	Mid-term target "below baseline"	Mid-term target Year	Status
Alameda	2005	25%	40%	2030	Staff - CAP underway
Albany	2004	25%	60%	2035	Council adopted
Berkeley	2000	33%			
Dublin	2010	15%	40%	2030	Staff - CAP underway
Emeryville	2004	25%	40%	2030	Adopted in CAP
Fremont	2005	25%	40%	2030	Staff
Hayward	2005	20%			General Plan
Livermore	2008	15%	60%	2030	Staff (source?)
Newark	2005	15%			
Oakland	2005	36%	56%	2030	Council adopted
Piedmont	2005	15%	40%	2030	Adopted in CAP
Pleasanton	2005	15%	40%	2030	Staff
San Leandro	2005	25%	40%	2030	Staff
Union City	2005	20%			
County	2005	15%			

Recommendation – Staff analyzed the 2015 GHG inventory and considered reductions for each sector that are realistic by 2030. When calculating realistic emissions reductions for each sector, staff came up with a target of 36% by 2030, however staff is recommending an aspirational goal of 40%. Staff recommends that the Committee make a recommendation to Council to adopt a resolution setting Hayward’s 2030 GHG reduction target at 40% below 2005 levels. This target would be consistent with the state’s and most other jurisdictions in Alameda County. In order to meet this goal, the reductions for each sector would need to be occur as follows:

- Reduce emissions from electricity by 90%
- Reduce emissions from natural gas by 20%
- Reduce emissions from passenger vehicles and commercial gasoline vehicles by 20%
- Reduce emissions from commercial diesel vehicles by 10%
- Reduce emissions from solid waste disposal by 20%

STRATEGIC PRIORITIES

This agenda item does not relate to one of Council’s three Strategic Initiatives.

SUSTAINABILITY FEATURES

Meeting GHG reduction goals is the primary objective of the City’s Climate Action Plan. Meeting the goals will require reducing emissions in every sector and will entail improving energy efficiency in buildings, increasing the use of renewable energy, and reducing vehicle-related emissions. All these actions will result in cleaner air for Hayward residents and for the region.

NEXT STEPS

Depending on direction from the Committee, staff will prepare a resolution for Council to adopt a 2030 GHG reduction goal. If Council adopts a 2030 target, the next step may be to re-evaluate the implementation programs in the Hayward2040 General Plan to ensure Hayward meets the goal.

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Approved by:



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