

May 26, 2020

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TITLE

SUBMITTAL OF THE 2016 COMMUNITY AND MUNICIPAL GREENHOUSE GAS EMISSIONS INVENTORY REPORTS

RECOMMENDED ACTION

Council receive the reports.

SUMMARY

As part of the City's ongoing greenhouse gas (GHG) monitoring effort and to comply with the 2017 Climate Action Plan (CAP), staff completed the 2016 Municipal and Community GHG Emissions Inventories report The 2016 GHG Inventory report indicates that the annual city-wide community GHG levels have decreased by 12% compared to the 2005 baseline. These reductions are even more significant after taking into account the 21% increase in population since 2005. The report indicates a 28% decrease in per capita emission levels compared to the 2005 levels. In addition, the report indicates a 31% decrease in emissions from municipal sources (i.e. operations, facilities, and vehicle fleet) compared to 2014 levels and 69% below the 1990 baseline. Staff will continue implementation of the 2017 CAP and work with Climate Change Working Group (CCWG) on recommended updates to the CAP and GHG reduction goals for City Council consideration later this year.

ENVIRONMENTAL REVIEW

The proposed activity has been reviewed for compliance with the California Environmental Quality Act (CEQA) and it has been determined that the activity is not a "Project" as defined under Section 15378 of the state CEQA Guidelines because it will not result in a physical change in the environment; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines, the activity is not subject to CEQA. Notwithstanding the foregoing, it has also been determined that the activity qualifies for an Exemption pursuant to Section 15061(b)(3) of the California Environmental Quality Act State Guidelines. Thus, no environmental review is required.

BOARD/COMMISSION/COMMITTEE RECOMMENDATION

City Staff presented the 2016 Community and Municipal GHG inventories to the Sustainability Commission (SSC) on March 9th, 2020. The SSC unanimously recommended that City Council adopt the report.

DISCUSSION

The City of Chula Vista continues to be a nationally-recognized leader in fighting climate change in our community. The 2017 CAP includes 11 climate "mitigation strategies", each with multiple individual actions designed to reduce GHG emissions. Together with previous climate action planning documents, these actions guide the on-going City staff efforts. In addition to addressing climate change, these climate action measures offer numerous community co-benefits such as utility savings, better air quality, reduced traffic congestion, local economic development, and improved quality of life. To date, 69% of the actions have been completed or are considered to be complete and ongoing, see attached 2017 Climate Acton Plan Implementation Update.

2016 GHG Inventory Report Methodology:

For the 2016 GHG Emissions Inventory report, the Municipal GHG Inventory continued to be created by City staff. However, unlike previous years, the Community GHG Emissions Inventory was compiled by the University of San Diego's Energy Policy Initiatives Center (EPIC). For this effort, EPIC utilized SANDAG's Regional Climate Action Planning (ReCAP) Framework. The ReCAP framework is a tool created by SANDAG through collaboration with local agency staff and leading climate planning experts to prepare a planning framework that identifies best practices and guidance for preparing Climate Action Plans (CAP) and monitoring their implementation over time. ReCAP establishes a technical framework for regionally-consistent climate action planning that preserves local policy flexibility for the unique needs and circumstances of each local jurisdiction. Additional information on ReCAP is available on the SANDAG website.

While efforts were made to ensure comparability between the 2016 GHG inventories and previous GHG inventories, there are still some unavoidable differences, such as changing Vehicle Miles traveled (VMT) modeling, in data sources or analysis that could affect a direct comparison between this inventory and previous inventories. The 2016 Snapshot and monitoring information are attached and for a full review of the inventory methodology, please review the attached "TECHNICAL APPENDIX I" -- it can be found online at <u>www.sandag.org/uploads/cap/ReCapTALpdf</u>. Many of the GHG inventory methodologies remained the same and continued to use the U.S. Community Protocol (Version 1.0). In the protocol, the emissions from five main parameters – building energy consumption, transportation, water (embedded energy), wastewater, and solid waste – are evaluated. These parameters are based solely on "end use activities" and their emissions are expressed as CO2 equivalent (or CO2e), which allows greenhouse gases of different strengths to be added together.

There were three main changes to the 2016 GHG emissions inventory methodology:

- 1. For the Municipal GHG Inventory emissions from transit were removed because those operations are controlled by Metropolitan Transit System (MTS) not the City.
- 2. For the Community GHG Inventory, the energy usage from the Port of San Diego was excluded from the City's inventory and included in the Port's GHG inventory because the Port has final regulatory authority over Port land.
- 3. For the Community GHG Inventory, the alternative Daily Cover (ADC), typically organic or "green" waste that is used to cover landfills at the end of the day, was not included because the State listed

this use as a waste diversion. There were approximately 8,000 MT CO2e from ADC in 2014 and 9,000 MT CO2e in 2016, but by 2020, state law will not count ADC as diversion.

Community Inventory

Community GHG emissions in 2016 totaled 1,152,000 metric tons of carbon dioxide equivalent (MT CO2e). This is a reduction of 8% below the 2014 inventory and 12% below the 2005 baseline. The City is now within 2% of meeting its 2020 GHG reduction goal of 15% reductions below 2005. As noted, these emissions reductions are even more significant after taking into account the 21% increase in population during the same time period. The report indicates a 28% decrease in per capita emission levels compared to the 2005 baseline levels. The three largest sources of emissions were from the transportation sector (59%), electricity sector (19%), and natural gas sector (17%). Of those sectors, the natural gas sector saw the most growth from the last inventory as it rose 5% above its 2005 baseline. The 2016 GHG inventory demonstrates significant reductions in community wide GHG emissions, but significant further reductions are needed to meet the City's and State's long-term carbon reduction goals. City staff will be monitoring future inventories to ensure that GHG reductions were not caused by methodology changes in how some source data was created by data providers.

Municipal Inventory

The 2016 GHG Emissions Inventory indicates that Chula Vista's municipal GHG levels have decreased by 30% compared to the last 2014 inventory. GHG emissions from municipal sources (i.e. operations, facilities, and vehicle fleet) in 2016 totaled 9,740 metric tons of carbon dioxide equivalents (MT CO2e). This also represents a reduction of 69% below the initial 1990 inventory. The two largest sources of emissions were from the energy consumption at facilities (39%) and the City's vehicle fleet (33%).

<u>Next Steps</u>

The availability of data is critical for the preparation of GHG emission inventories and continues to be a challenge. As with previous years, due to data availability, there was a delay in the City's ability to create the 2016 GHG inventory. For future inventories, staff will continue to work with the University of San Diego's Energy Policy Initiatives Center (EPIC) and SANDAG to leverage the GHG inventory guidance that was created as part of the ReCAP stakeholder effort.

It should be noted that SANDAG has notified jurisdictions that due to changes in their modeling they will not be able to provide a 2018 VMT update. The VMT models give staff an estimation of community wide vehicle activity so the transportation sector will be similar to the 2016 values in this inventory. Staff will also be waiting for SANDAG to provide VMT estimates for 2030 and beyond to update the 2030 GHG forecast. Additionally, SDG&E has notified the City that due to programing changes they may not be able to provide energy data consistent with previous inventories after 2020. Staff will continue to work with SDG&E and EPIC on possible solutions.

We anticipate the 2018 inventory to be completed by the end of this year with future inventories being conducted every other year, depending on data availability. In addition, while the recent environmental impacts of the Covid-19 global pandemic will not be seen in either of these inventories, staff will be tracking early impacts.

Staff will continue to implement the 2017 CAP and City Operations Sustainability Plan. The most recent CAP progress, attached, shows that 69% of actions included in the 2017 CAP were either completed or ongoing. Some of the implementation actions being taken are:

- Adoption of the CCA Feasibility Study, which lead to joining San Diego Community Power in an effort to provide 100% renewable electricity;
- Creating the Alternative Transportation Master Plan;
- Efforts to adopt ordinances that would require energy efficiency retrofits in older existing homes and a benchmarking ordinance that would increase transparency into energy usage large commercial buildings and require energy efficiency improvements for under-performing buildings;
- Completion of the Zero Net Energy Study of municipal buildings.

Staff will continue to work with Climate Change Working Group (CCWG) which has held quarterly meetings over the last 18 months, to finalize recommendations updating City CAP actions and GHG reduction goals. Once approved by CCWG, the recommendations will be presented to the Sustainability Commission and then City Council later this year.

DECISION-MAKER CONFLICT

Staff has reviewed the decision contemplated by this action and has determined that it is not site-specific and consequently, the 500-foot rule found in California Code of Regulations Title 2, Section 18702.2(a)(11), is not applicable to this decision for purposes of determining a disqualifying real property-related financial conflict of interest under the Political Reform Act (Cal. Gov't Code § 87100, et seq.).

Staff is not independently aware, and has not been informed by any City Council member, of any other fact that may constitute a basis for a decision-maker conflict of interest in this matter.

CURRENT-YEAR FISCAL IMPACT

The development of the 2016 GHG Emissions Inventory is supported through existing departmental budgets and external funding sources such as the SDG&E Local Government Partnership, thus there is no new General Fund impact.

ONGOING FISCAL IMPACT

There are no ongoing fiscal impacts associated with the 2016 GHG Emissions Inventory.

ATTACHMENTS

Attachment 1 - 2016 COMMUNITY GREENHOUSE GAS EMISSIONS INVENTORY Attachment 2 - 2016 MUNICIPAL GREENHOUSE GAS EMISSIONS INVENTORY

- Attachment 3 2017 Climate Acton Plan Implementation Update
- Attachment 4 SANDAG ReCAP 2016 Snapshot
- Attachment 5 SANDAG ReCAP Snapshot FAQ

Attachment 6- SANDAG ReCAP 2016 Snapshot GHG Inventory Data and Metrics

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