

STATION 3

CLIMATE ACTION PLAN



Framing The Approach...

WHAT ARE INVENTORIES AND PROJECTIONS?

An emissions inventory is a snapshot reference of annual emissions associated with community-wide activities. **Emission inventories are a critical component of the CAP update process and will be used to establish reduction targets/goals and monitor emissions over time.**

Inventories are based on activities that a city has control over taking place within its boundaries. Emissions originate from a variety of sources, all of which are documented, quantified, and analyzed within an inventory. A typical inventory for a local agency captures emissions from transportation, electricity, natural gas, water, wastewater, and solid waste activities. Emissions are calculated in metric tons of carbon dioxide equivalent (MT CO₂e). Data and estimates from different organizations (e.g., SANDAG, SDG&E, local jurisdiction departments) are needed to complete an inventory. Inventories are developed based on the best available data and methods.

Table 3 Total and Breakdown of Estimated GHG Emissions in Esccondido [2012-2014]

Emissions Category	2012 GHG Emissions (MT CO ₂ e)	2013 GHG Emissions (MT CO ₂ e)	2014 GHG Emissions (MT CO ₂ e)
On-Road Transportation*	498,000	490,000	479,000
Electricity	256,000	245,000	215,000
Natural Gas	118,000	121,000	108,000
Off-Road Transportation	30,000	29,000	29,000
Solid Waste	24,000	25,000	25,000
Water	11,000	12,000	13,000
Wastewater	6,000	5,000	5,000
Total	943,000	927,000	874,000

Sum may not add up to totals due to rounding. GHG emissions for each category are rounded to the nearest thousands. Values are not rounded in the intermediary steps in the calculation. *Based on SANDAG Series 13 vehicle miles traveled (VMT) estimates. 2012 is the Base Year. Energy Policy Initiatives Center, 2018.

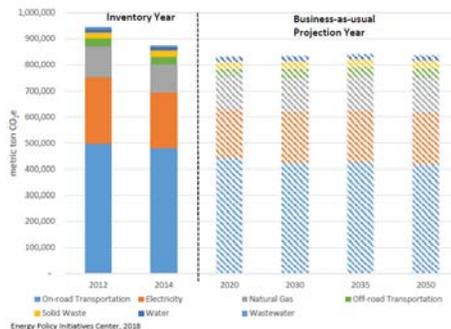


Figure 8 SANDAG GHG Emissions Projections (Esccondido, 2020, 2030, 2035, and 2050)

Esccondido's revised baseline inventory is set at year 2014. The GHG baseline inventory and forecasts for 2030, 2035, and 2050 provide benchmarks against which we can set goals - and then measure future progress.

FRAMING EMISSION REDUCTION CRITERIA

The California Air Resources Board's (CARB's) guidance on target-setting for CAPs preserves local discretion in selecting reduction targets, yet offers recommended approaches for aligning local targets with the statewide goals. Future year targets (benchmarked to 2030, 2035, or 2050) should be based on the following accepted methods:

- Use the best science.
- Evaluate locally-appropriate emissions reduction goals.
- Show a downward-trending GHG emissions trajectory.

While there are similarities from city to city in the scope of content of local CAPs, the reduction measures and strategies within each CAP should be uniquely crafted and based on local needs and conditions.

Once emissions targets have been established, the next step in the climate action planning process is to identify the GHG reduction strategies that will achieve the targets. Federal, State, and local activities have a role to play in achieving GHG emissions reductions for a local jurisdiction.

Before developing local strategies, the GHG reduction impact of federal and State policies and programs is quantified at the local level. The difference between the legislatively-adjusted inventory and the emissions reduction targets is known as the emissions gap. Cities typically must consider different ways to "close the gap" while aligning with other priorities for the community.

