

Table 4.8-11
SB 375 GHG Reduction Targets and GHG Emissions under the Proposed Plan, 2035

	lbs CO₂ per person per day, 2035
Per Capita Emissions under the proposed Plan	<u>20.319.8</u>
Percent Reductions under the proposed Plan	<u>-21%-24%</u>
ARB Target	-13%

Source: Appendix G-3 to the EIR

Note: Average weekday per capita CO₂ reductions for passenger cars and light-duty trucks from 2005 level of 26.0 pounds per person per day.

The revised emissions and percentages in this table have been decreased by 2% per ARB requirement that EMFAC2014 model results be revised with 2% percent adjustment factor.

2035 Conclusion

Implementation of the proposed Plan would not conflict with SB 375 emission reduction targets for 2035. Therefore, this impact (GHG-3) in the year 2035 is less than significant.

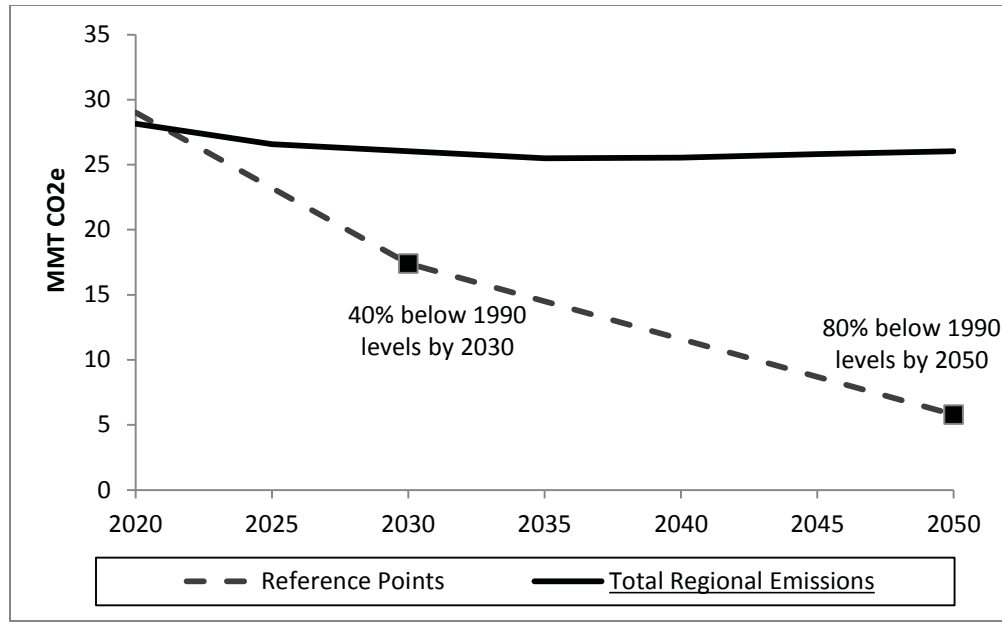
GHG-4 BE INCONSISTENT WITH THE STATE'S ABILITY TO ACHIEVE THE EXECUTIVE ORDER B-30-15 AND S-3-05 GOALS OF REDUCING CALIFORNIA'S GHG EMISSIONS TO 40 PERCENT BELOW 1990 LEVELS BY 2030 AND 80 PERCENT BELOW 1990 LEVELS BY 2050

ANALYSIS METHODOLOGY

The analysis evaluates whether the proposed Plan is inconsistent with the State's ability to achieve the Executive Order S-3-05 goal of reducing California's GHG emissions to 80 percent below 1990 levels by 2050. The analysis also evaluates whether the proposed Plan is inconsistent with the State's ability to achieve the Executive Order B-30-15 goal of reducing California's GHG emissions to 40 percent below 1990 levels by 2030.

The Executive Order S-3-05 goal of reducing California's GHG emissions to 1990 levels by 2020 was adopted in AB 32, and is evaluated in Impact GHG-2. Therefore, this analysis focuses on whether the region would achieve the 2050 goal. 2035 is also addressed in Impact GHG-4 as an interim year using the Executive Order B-30-15 goal of reducing California's GHG emissions to 40 percent below 1990 levels by 2030.

To perform this analysis, SANDAG identified estimated 2035 and 2050 emissions reduction reference points for the region. Note that there is no requirement that the SANDAG region's emissions be reduced by the same percentage ("equal share") as the statewide percentage in order for the State to achieve the Executive Order's goal. The proposed Plan's impacts nevertheless are considered significant if total emissions in the San Diego region exceed the estimated 2035 or 2050 GHG reduction reference points. A graph comparing regional emissions projected in the proposed Plan versus the Executive Order-based reference points is provided as Figure 4.8-1.



Source: Appendix G-1 to the EIR.

Note: the solid black line has been relabeled from “proposed Plan emissions” to “total regional emissions” and reflects the revised GHG emissions based on the minor modifications to the project description and the new version of EMFAC2014 (v1.0.7) released by ARB in May 2015. On-road GHG emissions in the Draft EIR were calculated using EMFAC2014 (v1.0.1).

Figure 4.8-1. Regional GHG Reductions Required to Meet Executive Order Reference Points for 2035 and 2050 vs. ~~Proposed Plan~~ Total Regional Emissions

SANDAG identified the 2050 reference point by applying an 80 percent reduction to the San Diego region’s 1990 emissions level. The 40 percent reduction was applied to the region’s 1990 emissions level to identify a 2030 reference point, which was then used to develop a 2035 reference point by using a straight line trajectory from the 2030 goal to the 2050 goal.

As described in Impact GHG-2, the San Diego region’s 1990 GHG emissions totaled 29 MMT CO₂e (see Appendix G-1 to the EIR). By applying the methodology described above, the 2035 reference point was identified as 14.5 MMT CO₂e, and the 2050 reference point was identified as 5.8 MMT CO₂e.

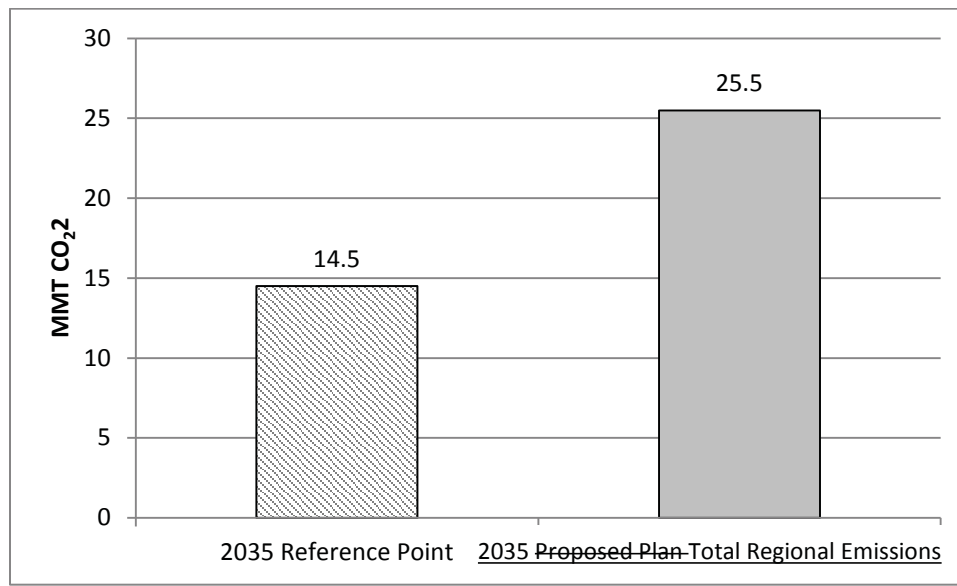
For the purpose of evaluating impacts under Impact GHG-4, because the Executive Order goals include both regional growth and land use change and the transportation network, the analysis has not been separated into the two categories. The impact assessment includes both regional growth and land use change and the transportation network. Emission calculations are provided in Appendix G-1.

During the timeframe of the proposed Plan, climate change effects that are likely to exacerbate the proposed Plan’s greenhouse gas emissions impacts include but are not limited to increases in temperatures and frequency, duration, and intensity of heatwaves (which could lead to increases in GHG emissions from local fossil fuel-fired power plants to meet electricity demands); and wildfires (which release GHG emissions of criteria pollutants). In general, these climate change effects would increase between 2020 and 2050. Climate change effects are discussed in more detail in Appendix F.

2035***Regional Growth and Land Use Change and Transportation Network Improvements and Programs***

As discussed under Impact GHG-1, under implementation of the proposed Plan, total GHG emissions for the San Diego region in 2035 are projected to be approximately 25.5 MMT CO₂e, or 28 percent lower than GHG emissions in 2012 (Table 4.8-7). To be in line with its “equal share” of the state emissions reduction goals set forth in Executive Orders S-3-05 and B-30-15, regional GHG emissions would need to decrease to 14.5 MMT CO₂e by 2035.

Figure 4.8-1 shows a projection of “equal share” reductions for the San Diego region, compared to estimated proposed Plan emissions. In addition, Figure 4.8-2 compares the Executive Order-based 2035 reference point for the region with projected GHG emission under the proposed Plan. This is a significant impact.



Source: Appendix G-1 to the EIR

Figure 4.8-2. 2035 GHG Emissions Reference Point vs. Proposed Plan Total Regional Emissions

2035 Conclusion

Because the total emissions in the San Diego region of 25.5 MMT CO₂e in 2035 would exceed the regional 2035 GHG reduction reference point of 14.5 MMT CO₂e (which is based on EO-B-30-15 and EO-S-3-05), the proposed Plan’s 2035 GHG emissions would be inconsistent with state’s ability to achieve the Executive Orders’ GHG reduction goals. Therefore, this impact (GHG-4) in the year 2035 is significant.