

Memorandum

April 21, 2009

To: Travel Management Subcommittee

From: Erin Morrow
Daivamani Sivasailam

Subject: Development of Baseline CO₂ and GHG Emissions Inventories

Background

At previous meetings of the Travel Management Subcommittee and at the April 2009 meeting of the TPB Technical Committee, DTP staff discussed the different elements that comprise the baseline CO₂ and GHG emissions inventories. These baseline inventories, to be reflective of available technologies and Department of Energy-developed market trends, will then be used as the starting point for scenario assessment of the 'What Would it Take Scenario' (WWIT) to meet the COG Board Climate Change Steering Committee's greenhouse gas reduction goals. Staff identified three emissions reductions that should be removed from the Mobile 6 emissions inventory to develop the baseline CO₂ and GHG inventories.

**Baseline = Mobile 6 emissions - CAFE35 - alternative fuel/technology vehicles -
TERM Commitments**

Discussion

Staff has applied a consultant spreadsheet to determine the emissions reductions due to the impact of CAFE 35 (Exhibit 1). The calculation of the emissions reductions from TERM commitments is underway.

Staff has been researching how the emissions impact of forecasts for alternative fuel and alternative technology vehicles should be accounted for in the baseline inventory. Initially, staff proposed the approach of determining which of the alternative fuel and

alternative technology vehicles were expected to be accounted for in the CAFE 35 assumptions and then determining the additional CO₂ and GHG impacts of the remainder of the vehicles. Upon further discussion with the consultant, staff is now convinced that all of the tailpipe emissions for alternative fuel and alternative technology vehicles are accounted for in the CAFE 35 reductions spreadsheet. The consultant explained, that “all vehicles that meet the size requirements of CAFE will be accounted for in the program regardless of fuel.” Therefore, alternative fuel/technology vehicles do not need further consideration in the baseline.

Recommendation

Staff recommends that the baseline for CO₂ and GHG emissions now include the reductions from the impacts of CAFE 35 and the region’s TERM commitments as shown in the following equation.

$$\text{Baseline} = \text{Mobile 6 emissions} - \text{CAFE35} - \text{TERM Commitments}$$

Upon the completion of the TERMS benefits assessment to finalize the baseline conditions, these inventories for each milestone years will be advanced to the WWIT scenario assessment.

Exhibit 1

CO₂ Emissions Inventories - Baseline Adjustment of Mobile 6 Inventories to Reflect Impacts of CAFE 35 by 2020

