

State of California  
**Air Resources Board**

**BOARD ITEM SUMMARY**

**ITEM # 20-13-6:      Public Meeting to Hear an Informational Update on the 2020 Mobile Source Strategy**

**STAFF RECOMMENDATION:**

Staff will provide an informational update to the California Air Resources Board (CARB or Board) on the 2020 Mobile Source Strategy and the technology trajectories and concepts for the various mobile sectors identified from scenario planning that will enable the State to meet its air quality, climate, and air toxics goals over the next 30 years.

**DISCUSSION:**

Mobile sources, including cars, trucks, and a myriad of other on-road vehicles and off-road equipment, contribute the majority of smog-forming oxides of nitrogen (NO<sub>x</sub>) and the largest portion of greenhouse gas (GHG) emissions to California air quality challenges, and are a significant source of toxic air contaminants that directly impact community health. The 2016 Mobile Source Strategy was CARB's first integrated planning effort that developed complementary policies to reduce criteria pollutants like NO<sub>x</sub>, GHG, and toxics emissions from mobile sources.

The 2020 Mobile Source Strategy continues the multi-pollutant planning approach to determine scenarios for the various on- and off-road mobile sectors that are necessary in order to achieve California's numerous air quality targets, and GHG and community risk reduction goals between now and 2050. Consistent with Governor Newsom's Executive Order N-79-20 and California Senate Bill 44, the 2020 Mobile Source Strategy identifies a suite of programmatic concepts, many of which CARB is actively pursuing through individual public processes, that will enable the State to achieve the technology trajectories identified through the Strategy's scenario planning. These concepts maximize criteria pollutant and GHG reductions from mobile sources by going to zero-emission where feasible. For medium- and heavy-duty vehicles specifically, the scenarios call for the deployment of approximately 1.4 million medium- and heavy-duty zero-emission vehicles in California by 2045.

**SUMMARY AND IMPACTS:**

Meeting all of the State's near- and longer-term goals requires action across the full spectrum of mobile sources. Therefore, the 2020 Mobile Source Strategy addresses all mobile source sectors, including on-road vehicles and a wide range of off-road equipment sectors. The 2020 Mobile Source Strategy includes scenarios that identify the types and penetration of technologies needed to meet the State's many air quality, climate, and community risk reduction goals. Included in the scenario analysis are programmatic concepts to move each sector in the needed direction; these

concepts may be further developed and translated into formal measures to be included in the next State SIP (State Implementation Plan) Strategy and other CARB planning documents in coming years.

Statewide, the 2020 Mobile Source Strategy concepts could potentially achieve oxides of nitrogen reductions of over 580 tons per day in 2037, and reduce mobile source fuel consumption by 9.5 billion gallons of gasoline and 3.0 billion gallons of diesel equivalent in 2045. This equates to a Statewide well-to-wheel GHG emissions reduction of over 90 million metric tons of carbon dioxide equivalent in 2045.