

## API 12866 Meeting on EPA Proposed Rule: Light-Duty Vehicle Greenhouse Gas Emissions Standards

- API asks OMB to address one aspect of the NPRM: EPA should include a request for comment on the concept of using a well-to-wheels or lifecycle analysis approach.
  - An invitation to comment on a well-to-wheels approach would be akin to an ANPRM.
  - Comments received would inform the development of future vehicle emission standards.
  - We recognize there would not be sufficient time to incorporate this concept into the current rulemaking framework but a request for comment is critically important to begin this dialog.
- The current system considers only tailpipe emissions. With the shared goal of reducing carbon emissions in the transportation sector, a well-to-wheels approach provides a basis for comparative evaluation of the carbon impact of multiple different fuel-vehicle technologies. This approach would provide many benefits including:
  - More diverse transportation options for compliance.
  - Allows the market to drive carbon reductions at the lowest abatement costs.
  - Maintains a diversity of energy supply and promotes domestic energy security.
  - Maintains economic strength and job opportunities for energy, automotive, and agriculture industries.
  - Various researchers recognize the value of using a full lifecycle or well-to-wheels basis to measure GHG performance (see below).
- Liquid fuels can deliver near-term and ongoing carbon reduction benefits from the legacy vehicle fleet, and new internal combustion vehicles while the auto fleet transitions to new GHG reducing technologies over time. Requesting comment on a wells-to-wheels approach is the first step for EPA to establish such a framework in the future.

A. Elgowainy, et al, *Argonne National Laboratory*, 2016, "Cradle-to-Grave Lifecycle Analysis of U.S. Light-Duty Vehicle-Fuel Pathways: A Greenhouse Gas Emissions and Economic Assessment of Current (2015) and Future (2025-2030) Technologies." See <https://greet.es.anl.gov/publication-c2g-2016-report>. (Note: this study was undertaken by the DOE USDRIVE Partnership and is in the process of being updated.)

ConservAmerica, "Slow Down: The Case for Technology Neutral Transportation Policy." <https://www.conservamerica.org/latest-news/report-highlights-importance-of-policy-neutrality-in-decarbonizing-transportation-sector>

Yu Gan, Michael Wang, Zifeng Lu, Jarod Kelly, Argonne National Laboratory, "Taking into account greenhouse gas emissions of electric vehicles for transportation de-carbonization," *Energy Policy* 155 (2021) 112353 <https://doi.org/10.1016/j.enpol.2021.112353>

National Academy of Sciences, "Current Methods for Life Cycle Analyses of Low-Carbon Transportation Fuels in the United States," <https://www.nationalacademies.org/our-work/current-methods-for-life-cycle-analyses-of-low-carbon-transportation-fuels-in-the-united-states>

Oivind Andersson, Pål Borjesson, Energy Sciences, Lund University, Sweden, "The greenhouse gas emissions of an electrified vehicle combined with renewable fuels: Life cycle assessment and policy implications," *Applied Energy* 289 (2021) 116621 <https://doi.org/10.1016/j.apenergy.2021.116621>

Ramboll US Consulting, Inc., "Multi-Technology Pathways to Achieve California's Air Quality and Greenhouse Gas Goals: Heavy-Heavy-Duty Truck Case Study," February 1, 2021, prepared for Western States Petroleum Association and appended to WSPA, "Comments on Advanced Clean Fleets (ACF) Regulation March Workshops," April 17, 2021, <https://www.arb.ca.gov/lists/com-attach/36-acf-comments-ws-UCdTJIUkAzFVDFMy.pdf>