















## **Low Carbon Fuel Standard Statement of Principles**

California's transportation system needs to be profoundly transformed if the state is to meet its aggressive goal of reducing greenhouse gas (GHG) emissions 80 percent below 1990 levels by 2050. The Low-Carbon Fuel Standard (LCFS) must be designed to create a market for both evolutionary and revolutionary fuels, and these fuels must meet or exceed the state's air quality, sustainability and environmental justice goals.

To this end, the following organizations support an LCFS that embraces the following principles:

- 1. LCFS must ensure development and deployment of advanced, clean, ultra-low carbon fuels for the long term. The LCFS should not just promote low carbon fuels that are commercially available today. It should also aggressively stimulate the development and deployment of a new generation of ultra-low carbon fuels with significantly lower life cycle GHG emissions than conventional fuels. Ultra-low carbon fuels will need to be in widespread commercial use by 2020 not only to meet a 2020 standard of at least 10 percent GHG reduction, but also to lay the foundation for meeting the state's 2050 GHG reduction goals. Due to long timeframes involved in developing a new fuel infrastructure, it is critical that the LCFS ensure that ultra-low carbon fuels are a significant part of the compliance path in the initial years of the program. Fuel providers should not be allowed to simply purchase carbon credits from markets outside of the LCFS since this will undermine investments in innovative, low carbon fuels.
- 2. **LCFS should strive to exceed the 10 percent by 2020 goal.** The Governor's Executive Order clearly specified that the 10 percent reduction in gasoline and diesel carbon intensity is a minimum threshold. Given the difficulties the state already faces in meeting its 2020 and 2050 GHG reduction goals and the likelihood that even greater emission reductions will be needed in the transportation sector, CARB should strive to exceed the 10 percent by 2020 goal if technically and economically feasible.

- 3. LCFS must utilize best available science to estimate full GHG life cycle emissions, including emissions from direct and indirect land use conversion on a global scale. The LCFS GHG accounting must strive to account for all GHG emissions on a full life cycle basis, and use the best data available to estimate emissions associated with direct and indirect land use conversion.
- 4. LCFS must ensure environmental sustainability. CARB should ensure that the LCFS design provides the greatest possible protection against the use of low carbon fuels that are produced in an unsustainable manner that damages or endangers air quality, biodiversity, wildlife habitat, sensitive lands, soil health, water quality, water consumption and food security in California or other parts of the world. To accomplish this, CARB must ensure that environmental and sustainability impacts are carefully estimated using the best available information and measures are incorporated into the standard to minimize or avoid negative environmental impacts from the sourcing, production, and use of low-carbon fuels in California.
- 5. LCFS must protect air quality. As required by AB 32, the LCFS must "Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions." Additionally, the LCFS should not hinder the adoption of more stringent air pollution regulations needed to protect public health and must encourage low carbon fuels that provide air pollution co-benefits and that assist the state in meeting its air quality goals.
- 6. LCFS must prevent environmental justice impacts. As required by AB 32, the LCFS must be carefully designed to prevent disproportionate impacts on communities already disproportionately affected by air pollution and our state's transportation fuels industry. Specifically, LCFS should not contribute to the creation of "hot spots" of either criteria air pollution or air toxics throughout the fuels lifecycle. CARB also should evaluate the potential impacts on regional and global food supplies and seek to minimize adverse impacts to the greatest extent possible.
- 7. **LCFS design must incorporate the precautionary principle.** In areas where there may be substantial uncertainty regarding potential environmental and health impacts of the LCFS, CARB should adopt the precautionary principle<sup>2</sup>, particularly in relation to indirect land use conversion. As such, the precautionary principle requires: (1) CARB take preventive regulatory action in the face of uncertainty; (2) shifting the burden of proof to industry proponents of an activity or opponents of a proscribed regulatory action; (3) exploring a wide range of alternatives to possibly harmful actions encountered during any phase of the life cycle.

<sup>1</sup> AB 32, Section 38562 (b)(4)

<sup>&</sup>lt;sup>2</sup> Precautionary approach means taking anticipatory action to protect public health or the environment if a reasonable threat of serious harm exists based upon the best available science and other relevant information, even if absolute and undisputed scientific evidence is not available to assess the exact nature and extent of risk. -- CalEPA EJ Advisory Committee

- 8. Promote fuel diversity through a broad portfolio of low carbon fuels. Besides helping to protect our economy from volatile fuel prices, promoting fuel diversity will lessen the environmental and health effects associated with the production and refining of gasoline and diesel fuel. A variety of low carbon fuels, including biofuels, electricity, hydrogen and natural gas are needed to meet the LCFS target. The design of the LCFS should recognize that it may be appropriate to give incentives to fuels and infrastructure meeting specified criteria to overcome market barriers and spur innovation, thereby ensuring the promotion of a broad portfolio of low carbon fuels.
- 9. **LCFS design must provide regulatory stability**. The LCFS must provide a stable and predictable investment environment to ensure investment in innovative advanced low carbon fuels. Future reviews of the program's progress should occur at specified intervals in order to maintain a predictable regulatory environment that continues to encourage needed investment.

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