



TIER 3 VEHICLE EMISSION AND FUEL STANDARDS: Preserving Public Health, Promoting Competitiveness

Despite advances in fuel economy and pollution control, **vehicle pollution continues to exacerbate respiratory illnesses and increase health costs.**

- In the U.S., vehicles are responsible for the *majority of carbon monoxide and nitrogen oxide emissions (NOX)*, as well as 30% of volatile organic compound emissions (VOCs). These pollutants contribute to *smog and soot, which cause respiratory and heart disease.*
- Approximately *half the population of the United States lives in areas where air quality does not satisfy national standards.* Poor air quality causes an estimated 50,000 premature deaths each year, and *costs from air-pollution related illnesses are estimated to be \$150 billion per year.*



Implementing Tier 3 standards will result in cleaner-burning, more efficient fuels.

What Are the Tier 3 Standards?

The proposed Tier 3 standards **for fuels and vehicles are the most cost effective way to realize significant reductions in pollutants such as ozone (smog), particulate matter (soot), and air toxics.** The proposed rule will reduce air pollution by **lowering the sulfur content of gasoline**, which makes pollution control equipment more efficient.

- Building off the success of the Tier 2 rule, which decreased sulfur content from 300 ppm to 30 ppm, Tier 3 will further reduce sulfur content to 10 ppm in 2017. Ultra-low sulfur gas will help automakers meet the recently adopted fuel economy and GHG standards well as California's standards.
- The standards will *significantly reduce emissions of harmful pollutants, including smog forming NOX and VOCs by 80%, and particulate matter by 70%.*
- *The standards are consistent with global trends.* Japan, Australia, South Korea and the European Union (as well as California) have already successfully implemented

sulfur reductions that meet or exceed those in the Tier 3 proposal. Fuels in China are scheduled to conform to the 10 ppm standard by 2017.

- The standards are supported by a *wide range of stakeholders, including the auto and emissions control industries as well as state and local officials, and public health, labor, faith and environmental organizations.*

The Benefits of the Tier 3 Standards

Net Economic Gains

- According to EPA, by 2030, the annual monetized *health benefits of the Tier 3 standards will be between two and seven times the costs*; \$8 and \$23 billion in benefits as compared to an overall annual cost of \$3.4 billion.
- The health benefits of the standards are significant; Tier 3 will prevent as many as 23,000 cases of respiratory illness in children, 22,000 asthma attacks and 2,400 premature deaths each year, as well as reduce risks to millions of Americans living, exercising and working near major roads. In addition, these reductions in pollution related illnesses will increase productivity; the adoption of Tier 3 will allow Americans to avoid missing 1.8 million days of school and work each year by 2030.

Reducing pollution-related health care costs

- Health care costs reduce consumer spending, and divert employer spending away from expenditures such as wages, new hires, and capital improvements, thus having *a negative effect on the overall economy.*

Creating jobs and enhancing global competitiveness

- Refinery upgrades are expected to generate 24,500 installation jobs during the first three years of the program, and 5,300 permanent jobs. Additional benefits and jobs in the auto and emission control industries, which are significant drivers of the economy, will result from the development and production of Tier 3 technology.
- Tier 3 sends a clear signal to companies to begin incorporating new technologies. This will spur production, innovation and growth, allowing US industry to increase its competitiveness in the global marketplace.

What You Can Do

The public comment period for Tier 3 ends on July 1. If you are interested in supporting the proposed Tier 3 standards, please contact Carol Lee Rawn at rawn@ceres.org.

About Ceres

Ceres is an advocate for sustainability leadership. Ceres mobilizes a powerful coalition of investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices and solutions to build a healthy global economy. Ceres also directs the Investor Network on Climate Risk (INCR), a network of 100 institutional investors with collective assets totaling more than \$11 trillion. For more information, visit <http://www.ceres.org>.