

# **Tier 3 Gasoline Rulemaking**

#### Tier 3 is Unnecessary:

New Tier 3 regulations are discretionary. EPA has failed to demonstrate adequate scientific justification, technical need, and cost effectiveness. Tier 3 regulations would increase fuel manufacturing costs and increase greenhouse gas emissions. The rule should not be proposed. EPA should instead issue an Advance Notice of Proposed Rulemaking (ANPRM).

# Significance of the Refining Sector:

America's refining industry is a strategic and valuable asset. The industry supports more than 500,000 good paying jobs (avg. income \$94,000) and contributes 1.9% to GDP. It provides the U.S. with secure supplies of domestic fuel products, with nearly 90% of US gasoline consumption currently refined in the U.S.

- The rule would impose a high cost, minimal benefit regulatory requirement on America's already heavily regulated fuel supply.
- It could lead to significant domestic fuel supply reductions, higher petroleum product imports, potentially increased consumer costs, increased refinery emissions, closed U.S. refineries, and reduced energy security.

### Tier 3 Costs are Significant:

- Baker & O'Brien examined the effect of *gasoline sulfur* specification changes. The impacts are significant:
  - Nearly \$10 Billion in refinery capital expenditures
  - Annual compliance cost of \$2.4 Billion
  - o Increases in gasoline manufacturing costs up to 9 cents per gallon
  - o 1% increase in refinery GHG emissions
- Baker & O'Brien also examined the impact of both sulfur and RVP changes; the impacts are severe:
  - o 8% 19% reduction in summertime domestic gasoline production
  - \$10 \$17 Billion in refinery capital expenditures
  - Annual compliance cost of \$5 \$13 Billion
  - o Increases in gasoline manufacturing costs up to 12 25 cents per gallon
  - 1% 2.3% increase in refinery GHG emissions
  - 4 7 refinery closures
- In February 2012, EPA affirmed its plans to propose gasoline sulfur changes only
  - EPA continues to anticipate RVP changes, whether as a part of Tier 3 or as an independent rulemaking
    - EPA has stated that they expect gasoline cost increases of a penny per gallon and pointed to a 2011 MathPro study.
      - Baker and O'Brien's modeling methodology is more detailed and robust than MathPro, using a refinery-by-refinery analysis based on a mass balanced model
      - MathPro models rely on four hypothetical refineries meant to represent the aggregated production of dozens of refineries in 4 of the 5 PADDs (Petroleum Area Defense Districts).

#### **Rulemaking is Unjustified:**

- EPA has stated that 17 refineries currently make 10 ppm S gasoline, but ignores the remaining over 110 refineries that would be required to make significant investments.
  - These 17 refineries likely produce gasoline to meet California's more stringent standards, which already required significant investments.
  - o Gasoline sulfur was reduced from an average 300 ppm to 30 ppm in EPA's Tier 2 program.
- EPA has stated a need to reduce sulfur in gasoline to:
  - Improve air quality, but the 2008 EPA NAAQS Regulatory Impact Analysis did not mention sulfur or other fuel changes, even as it addressed need for various vehicle emission reduction technologies.
  - Facilitate fuel economy (CAFE) standards, but EPA has not identified any new vehicle technology expected to be deployed that would be enabled by lower sulfur levels or would be impaired by current sulfur standards.