



Ethanol Roundtable Discussion Items

***TIAX LLC Presentation
at the
South Coast Air Quality Management District
Ethanol Forum & Technical Roundtable***

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Roundtable Discussion Objectives

- Explore how to achieve benefits of ethanol use in transportation applications
- Air quality impacts of low level blends and neat fuel use (E85)
 - Ozone and PM2.5 attainment
 - Greenhouse gas emissions
- Implementing ethanol use in California's transportation market
 - Low level blend issues
 - Barriers to E85 use
- Benefits of displacing gasoline with ethanol



Low Level Blend Questions

1. What is the magnitude of VOC emissions in the South Coast Air Basin caused by the replacement of MTBE with E5.7 in the past few years? Please comment on the use of the Predictive Model in assessing emission impacts of ethanol in terms of data adequacy, model uncertainty and options available to the ARB to update the model appropriately.
2. What research priorities do you see relative to low-level ethanol blends and for E-85?
3. What would be the gasoline supply impact of eliminating the use of ethanol during summer months? Should the state allow greater wintertime oxygenate flexibility, or some other revision to wintertime ethanol use?

Use of E85 in California

4. What are the impacts on air quality with greater use of E-85 in FFV's and what can be done to expedite the development and use of Enhance Vapor Recovery systems for E-85?
5. What is the upper-range resource outlook for corn-based ethanol in terms of available acreage, water and soil constraints, food and feed competing demands, and net energy requirements (e.g., fertilizer and pesticide requirements, etc.) and what are the long-term prospects of cellulosic ethanol.

Additional Questions

6. What are the emission characteristics of FFV's running on gasoline or mid-range ethanol blends?
7. What changes to the Predictive Model are advisable to directionally enhance the emissions performance of Phase 3 gasoline?
8. What can be done to accelerate the development and commercial readiness of large-scale cellulosic ethanol production?
9. What is the proper role for ethanol to enhance state and national energy diversity and what steps specifically should the state pursue in the context of the Governor's biofuels Executive Order?
10. Should the state adopt an integrated biofuels plan which establishes targets, timelines and implementation strategies to accelerate the use of ethanol as a transportation fuel or fuel component?