

# Public Workshop on the Commercialization of New Alternative Diesel Fuels

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California Air Resources Board  
Stationary Source Division  
Alternative Fuels Branch

February 13, 2014



# Workshop Agenda

- Overview of Proposed Regulation
- 45-Day comments
- Modifications to Proposed Regulation
- Timeline
- Discussion

# Overview of Proposed Regulation

- Supports commercialization of alternative diesel fuels (ADFs) via 3-stage process
  - Stage 1: Pilot stage
  - Stage 2: Fuel specification development
  - Stage 3A: Commercial sales with significance threshold
  - Stage 3B: Commercial sales with no significance threshold
- Recognizes biodiesel as Stage 3A ADF with B10 significance threshold

# Biodiesel in Stage 3A

- Provides responsible approach to biodiesel growth
- Maintains air quality protections of CARB diesel
- Establishes effective blend (EB) calculation
  - B9.5 trigger to avoid statewide NOx increase
  - Recognizes NOx benefits from renewable diesel, low-NOx diesel
  - Accounts for lower NOx animal based feedstock

$$EB = 100 \times \left[ \frac{NBV - 0.5LN - 0.73RD - VM - 0.55AB}{TCV} \right]$$

*EB* – Effective Blend

*NBV* – Net Biodiesel Volume, excluding B5

*TCV* – Total Compression Ignition Fuels Volume

*LN* – Low-NOx Diesel

*RD* – Renewable Diesel

*VM* – Voluntary Mitigation

*AB* – Animal Biodiesel

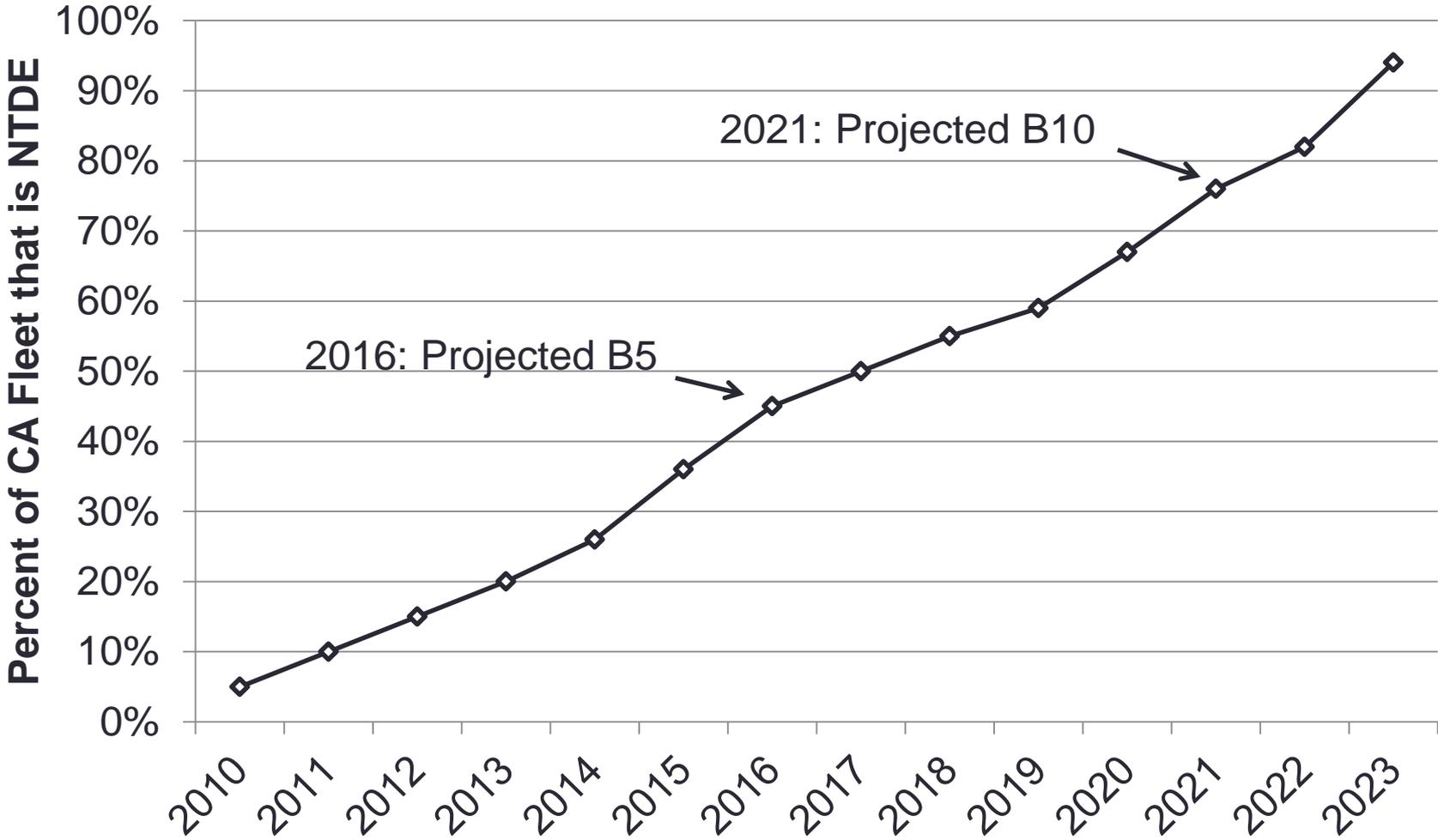
# Benefits of Effective Blend Level

- Accounts for current mitigating market factors
- Allows low carbon fuels to work together
- Long term policy sends positive market signal

# Regulation Safeguards

- Statewide effective blend calculated annually
- Milestones 75% and 95% of significance threshold
- At 75% (B7.5): submit mitigation plans, enhanced monthly reporting
- At 95% (B9.5): mitigation measures kick in
- Biodiesel mitigation required **before** significance threshold is reached
  - 1) Approved emissions equivalent additives
  - 2) Low NOx emitting diesel base fuels (i.e., renewable diesel, GTL)
  - 3) ADF formulation certified emissions equivalent to CARB diesel

# New Engines Eliminate NOx Impact in Long Run



# 45-Day Rulemaking Comments

- Six comment letters received
- Several technical comments suggested improvements
- SCAQMD comment requested additional protections for extreme ozone non-attainment areas (South Coast Air Basin, San Joaquin Valley)
- CEQA comments from two commenters

# Options Considered for Extreme Ozone Non-Attainment Areas

- Increased and more frequent regional reporting
- B10 per gallon cap on biodiesel use
- Regional effective blend calculation
- Producer/Importer effective blend calculation

# Proposed Modification for Producer/Importer Effective Blend Calculation

- Statewide (other than extreme ozone non-attainment areas)
  - Effective blend calculation applies
  - Compliance plans due at EB of B7.5
  - NOx mitigation required at EB of B9.5
- Extreme ozone non-attainment areas (i.e., SCAB, SJV)
  - Biodiesel producers/importers subject to individual EB
  - Compliance plans due at EB of B5
  - NOx mitigation required at EB of B7.5

# Producer/Importer Effective Blend Calculation



## Producer

- Calculate EB
- **B5** – Submit compliance plan, additional info
- **B7.5** – Mitigation

## Blending

- Additional recordkeeping
  - **B99/B100** vol
  - BD supplier, producer name
  - **Volumes by blend level**
- Method of mitigation
- Maintain transaction records

## Distributor

- Maintain transaction records
- Maintain records of customer invoices

## Retail

- Maintain PTD records and volumes
- Light duty and medium duty data

# Other Proposed Regulation Modifications

- Clarifications
  - Engine manufacturer approval of ADFs
- Revise definitions
  - Biodiesel blend, hydrocarbon, significance level, supplier
- Technical correction to statewide effective blend equation
  - Adjust TCV term
- Format corrections
  - Missing section heading

# California Environmental Quality Act

- CEQA analysis required under rulemaking
- No significant adverse impacts from rulemaking
- Staff reviewing CEQA comments
- Comments and responses to be made publicly available

# Timeline

- February 18, 2014 – Workshop comments
- February 20, 2014 – 15-Day proposed modifications
- March 10, 2014 – CEQA comments/responses published
- March 20, 2014 – Board hearing

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## **Alternative Diesel Fuel Website:**

<http://www.arb.ca.gov/fuels/diesel/altdiesel/biodiesel.htm>

# Discussion

Thank You