Agenda

• Introduction
• Revised Draft Regulatory Language and Concepts
  – Enhanced Regulated Party
  – Credit Trading
  – Method 2A/2B Certification
  – Electricity Regulated Party
  – Energy Efficiency Ratio (EER) Revisions
  – Low-Energy-Use Refineries
  – High Carbon-Intensity Crude Oil (HCICO)
  – Land Use Change (LUC)
• Next Steps
Proposed Amendments

Revised Draft Regulatory Language and Concepts

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Draft Amendments

• Presented at first workshop - July 22, 2011
  – Revised “import facility” definition
  – Revised “producer” definition
  – Added definition for “transloading facility”

• Draft amendments would have granted initial regulated party status to:
  – Out-of-state fuel producers
  – Transloading operators
Comments and suggested revisions:

• Revise “import facility” definition to include transportation equipment
  – Previous draft excludes suppliers, distributors, marketers, entities involved in importation process
  – Broader interpretation is needed

• Delete definition for “transloading facility”

• Add definition of “supplier”

• Revise definition of “producer” to identify shipments designated for use in California only
Proposed Amendments

• Revised “import facility” definition
  – Includes transportation equipment
  – Broadens definition to include importation entities

• Deleted “transloading facility” definition

• Revised “importer” definition
  – Specified as those who own an imported product when delivered at import facility in CA

• Revised “producer” definition
  – Report volumes designated for shipment to CA only

Note: Revisions reflect changes to previously proposed draft amendments presented on July 22, 2011.
Revised Draft Regulatory Language and Concepts

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Draft Amendments

• Presented at first workshop - July 22, 2011
  – Detailed the CI selection for Opt-In fuels
  – Provided Opt-Out procedures
  – Inclusion of jurisdictional language

• Draft amendments specified procedure:
  – Necessary information to provide for CI selection
  – Timeline for submission of Opt-Out notice
General Comments

• Suggestions and recommended revisions:
  – How intermediate or upstream parties would opt-in
  – Additional time requested for providing notice of opt-out

• Proposed amendments:
  – Opt in for
    • non-CA ethanol or biomass-based diesel producers
    • intermediates (between producer & importer)
    • gas companies in lieu of fueling station owners
  – Address multiple parties claiming reg party status for same fuel
  – Revised 30-day opt out notice to 90 days
Proposed Amendments

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Draft Amendments

Presented at first workshop - July 22, 2011

• Revisions to 95484(b)
  – Credit Calculations
  – Annual Compliance

• Creation of 95488
  – Generation and Acquisition of Transferable Credits
  – Credit Transfers
  – Mandatory Retirement of Credits for the Purpose of Compliance
  – Public Disclosure of Credit and Deficit Balances and Credit Transfer Information
Draft amendments offer:

- Clear distinction between credit generation and annual deficit compliance
- The framework for a credit trade market
- Details to be included for each credit transfer
- Unique IDs for tracking of credits
- Compliance hierarchy for credit retirement
Suggestions and recommended revisions:

• No distinctions for when a credit is generated
• Reporting of credit market activities remain on a aggregated basis
• Removal of credit price on credit transfer forms
• Review of credit transfer to occur within 6 months
• Clarify language in 95484(b) where compliance period is used in two separate ways
ARB’s Response

• Proposed amendments:
  – Clarified language in 95484 to address uncertainty
  – Revise Credit Transfer and Allocation forms

• No proposed revisions:
  – Credit IDs
    • IDs will have generalized names
    • Related only to the fuel type and generation quarter
  – Average transaction price will be reported
    • Individual transaction prices will be kept confidential
    • Necessary to provide accurate trends for LCFS
No proposed revisions (cont.):

• Credit retirement hierarchy
  – Tracked through Credit IDs
  – Burden of tracking is on ARB staff
  – Invalid credits which were retired can be replaced with currently available credits.
  – Invalid credit burden would fall upon credit generator
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Method 2A/2B Certification

• No significant changes in direction or approach have occurred since the last workshop

• We continue to refine and develop the certification process
  – Additional detail on information submission requirements and the evaluation process are in the current version of the regulation language.

• Our responses to the comments from the last workshop show why we’re headed in this direction.
Responses to main comments received:

• Keep the adoption of new pathways within the regulation change framework.
  – Rulemakings require substantial ARB resources.
  – Rulemaking process impractical for frequent Lookup Table updates.
  – Resolution 09-31 directs transition to certification program, if feasible.
  – Certification process will retain transparency, public review.
  – Discretion is minimized.
Responses to main comments received (Cont.):

• Some commenters questioned our documentation submission requirements. Reasons:
  – Direct inspection of out-of-state plants impractical.
  – Comprehensive documentation needed to show that ARB decisions are well-founded and sound.
Method 2A/2B Certification

- Staff also proposes to clarify the language found at 95486 (b)(2)(B)
- Regarding the use of Method 1 (reporting using Lookup Table CIs), it says:
  
  . . . the regulated party must use the carbon intensity value in [the] Lookup Table that most closely corresponds to the production process used to produce the regulated party’s fuel.

- The proposed revision would clarify applicable procedure when no Lookup Table pathway closely corresponds with the regulated party’s pathway.
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Changes in Proposed Regulation Language Since July Workshop

• Opportunity added for businesses to receive credits for employees charging EVs at work
• Requirements added for all potential regulated parties
• Scope of requirements to receive credits broadened
• Reporting requirement added
• Potential default credit recipients added
General Requirements to Receive Credits

- Offer TOU rate schedule that encourages off-peak charging
- Actively educate the public about the environmental and economic benefits of electric transportation
- Report annually including:
  - Detailed summary of satisfaction of requirements
  - Accounting of the number of EVs and/or charging events in the service area
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Data for EER Calculation for FCVs

- Honda FCX Clarity: 61 mpg
- Honda Accord (reference vehicle): 26 mpg
  \[ \text{EER} = \frac{61}{26} = 2.35 \]
- Mercedes F-Cell: 54 mpg
- Mercedes SLK350, SLK300, C300 (reference vehicle): 21 mpg
  \[ \text{EER} = 2.57 \]
- Average EER = \( \frac{2.35 + 2.57}{2} = 2.46 \)
- Average EER is divided by 1.3 to reflect 30% mpg improvement for gasoline vehicles due to Pavley Regs.: \[ \text{EER} = \frac{2.46}{1.3} = 1.9 \]
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Low Energy Use Refineries

• CI of refining portion of lifecycle assessment significantly less
• Board directed staff to consider provisions
• Staff proposal
  – Refiner must show lower refining CI of at least 5g CO$_2$e/MJ from current average (substantiality)
  – Lower CI of 5g CO$_2$e/MJ correlates to LCFS standard in 2018
  – Low energy use refiners would not generate deficits before 2018
Low Energy Use Refineries

- Credit generation identical to current process
  - No additional credits generated for lower CI for CARBOB and ULSD
  - Credits generated with CIs lower than the LCFS standard in effect

- Credits can be accumulated, sold, or both
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**HCICO Provision**

- Staff presented five potential approaches to the treatment of HCICOs:
  - Current Approach with Amendments
  - CA Average Approach
  - Hybrid Approach
  - Company Specific Approach
  - Worldwide Average Approach

- Received written comments on HCICO provisions:
  - Letters received are posted on our website
  - Ask for removal of HCICO provisions
  - Provide specific input on the five approaches
Evaluating Potential Approaches

• Currently gathering information: Refiners survey sent in August

• Received data from six companies so far
  – Three companies have provided complete data
  – Three companies have provided partial data

• Some companies have referred to CEC for data
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Agenda

• Presentation by Wally Tyner on GTAP model revisions and revised land conversion estimates
• Comments/Questions
• Presentation by Holly Gibbs on carbon stock estimates
• Presentation by Rich Plevin on emission factor model
• Comments/Questions
• Presentation by ARB staff on sensitivity of LUC CI to model structure and parameter changes
• Comments/Questions
Next Steps

- Comments due Sept 28, 2011
- Next public workshop - October 2011
- 45-day comment period begins Oct 31, 2011
- Board hearing – Dec 2011
## Contact Information

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Thank You