

## ***Low Carbon Fuel Standard Proposed Amendments***

April 3, 2013

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### ***Agenda***

- Proposed Draft Regulatory Changes
  - Electricity Credits for Fixed Guideway Transportation and Forklifts
  - LCFS Reporting Tool – Credit Bank and Transfer System
  - Miscellaneous Changes
- Next Steps
- Contact Information

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### ***Proposed Draft Regulatory Changes***

- Electricity Credits for Fixed Guideway Transportation and Forklifts
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### ***Electricity Credits Overview***

- Staff concept to include fixed guideway transportation and electric forklifts
- Stakeholder requested alternate approach to include alternative fuels in diesel baseline
  - Method
  - Results
- Requirement for residential metering in 2015

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### ***Staff Concept to Include Fixed Guideway Transportation and Forklifts in the Regulation***

- Board directed staff (Resolution 11-39) to further evaluate feasibility of generating credits for electricity used in nonroad transportation sources
- Staff is considering adding fixed guideway transportation (electric rail) and electric forklifts to the regulation
- Staff has previously presented a concept to allow these sources to generate credits using a modified credit calculation

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### ***Alternate Approach of Including Alternative Fuels in the Baseline***

- Stakeholders requested analysis of an alternate approach
- This approach involves adjusting the 2010 baseline by including 2010 alternative fuels use that is not currently in the baseline
- Fixed guideway transportation and electric forklifts (and other sources) can be added to the 2010 baseline
- This approach adjusts the diesel standard and therefore affects the number of deficits and credits generated

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### Method to Include Alternative Fuels in the Baseline

- CI of diesel is 98.03 gCO<sub>2</sub>e/MJ
- We adjusted the CI to include 2010 fuel use in:
  - Fixed guideway transportation
  - Electric forklifts
  - Transit natural gas
  - Non-transit natural gas
- Other alternative fuel use could be added, but results would not likely change substantially

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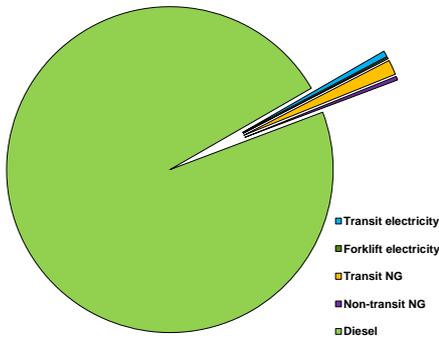
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### Magnitude of Fuel Energy Use (MMJ) in Adjusted Diesel Baseline



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### Results of Including Alternative Fuels in the Baseline

- Including alternative fuels in the baseline
  - reduces the diesel carbon intensity by 1.1 gCO<sub>2</sub>e/MJ
  - increases projected annual deficits
- Additional annual deficits on the order of 440,000 MTCO<sub>2</sub>e/year
- Total fuel pool 2014 deficits increase by 14%
- Total fuel pool 2020 deficits increase by 3%

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**Results of Including Alternative Fuels  
in the Baseline**

- Staff calculated credits for alternative fuel use under the baseline approach *without* credit for fuel displacement
- Number of potential credits for fixed guideway transportation under the baseline approach decreases by 1.5% from staff's original concept
- Number of potential credits for NG fleet under the baseline approach decreases by 4-5% from staff's original concept

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**Requirement for Residential Metering in 2015**

- Section 95484(b)(3)(C)(1) states that effective January 1, 2015, reporting of electricity dispensed to electric vehicles in residences must be based on direct metering
- Many EVs owners are choosing to charge at residences with no meter
- A robust estimation method has been developed for use by CalETC members
- Staff recommends that the 2015 metering requirement be removed from the regulation

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**Proposed Draft Regulatory Changes**

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## Credit Bank & Transfer System - Update

### Upcoming Release Status – CBTS

- Internal ARB User Testing
  - Credit Transfer System
  - Accomodation of Brokers in CBTS
  - Other new functionality
- External User Testing
  - Credit Transfer System
  - Brokers and Regulated Parties
- Target Date for Completion: 4/17/2013  
Testing w/ system updates

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## LCFS Credit Bank & Transfer System (CBTS)

- Accommodates Brokers in transfers
- Nine different transfer scenarios
  - Non-Blind (4)
  - Seller-Blind (2)
  - Buyer-Blind (2)
  - Double-Blind (1)
- Identifies Carryback Credits

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## Other Enhancements

- Total Obligated Volumes
  - System Checks that the TOV remains positive
  - In operation during quarterly reporting
- Electricity – Annual Reporting
  - Enables upload of documents
- Other enhancements
  - Newly Revised User Guide
  - Improved file upload process

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### Clarify When Diesel CI Obligation Passes to Buyer

- CARB diesel CI obligation may be passing on to some diesel marketers/distributors (non-blenders)
- Contrary to regulatory intent
- Not a significant problem at this time
- Review section 95484(a)(2)(B)(4 & 5)
- Goal: Address potential issue while allowing CI obligation transfer to those intending to blend further (e.g., for biodiesel/renewable diesel credits)

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### Energy Density

- Allowing the use of an alternative energy density value
- Revision to Table 4 and following language

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## Credit Transfers

Revised Section 95488(c)(1)(B)

- “Requirements for Documenting a Proposed Credit Transfer” language to be modified
- Paper-based Credit Transfer Form will be discontinued
- All the required information will be captured online in an eForm

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## Credit Disclosure

- Revision to 95488(e)
- Providing the regulated party the capability to designate whether they would like to buy/sell credits
- Staff be looking into developing an online forum tool through the LRT

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## Next Steps

- Comments due April 18, 2013
- Submit via email to Katrina Sideco at [ksideco@arb.ca.gov](mailto:ksideco@arb.ca.gov)
- Next public workshops/workgroup meetings
  - April 4, 2013: Sustainability
  - April 30, 2013: Low-Energy-Use Refinery Provisions, Enforcement Provisions, iLUC Values
  - May 7, 2013: Amendments Workshop, Crude Oil Individual Refinery Approach, OPGEE
- 45-day comment period begins September 9, 2013
- Board Hearing – October 2013

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## Contact Information

<b>Proposed Regulatory Amendments (Overall Lead)</b>	<b>Katrina Sideco</b> (916) 323-1082 <a href="mailto:ksideco@arb.ca.gov">ksideco@arb.ca.gov</a>
<b>Electricity Credits for Fixed Guideway Transportation and Forklifts</b>	<b>Carolyn Lozo</b> (916) 445-1104 <a href="mailto:clozo@arb.ca.gov">clozo@arb.ca.gov</a>
<b>LCFS Reporting Tool (LRT)-Credit Bank and Transfer System</b>	<b>Greg O'Brien</b> (916) 323-0023 <a href="mailto:gobrien@arb.ca.gov">gobrien@arb.ca.gov</a>
<b>Miscellaneous Changes</b>	<b>Stephen d'Esterhazy</b> (916) 323-7227 <a href="mailto:sdesterh@arb.ca.gov">sdesterh@arb.ca.gov</a>

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<http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>

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**Thank You**

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