

California Environmental Protection Agency



Air Resources Board

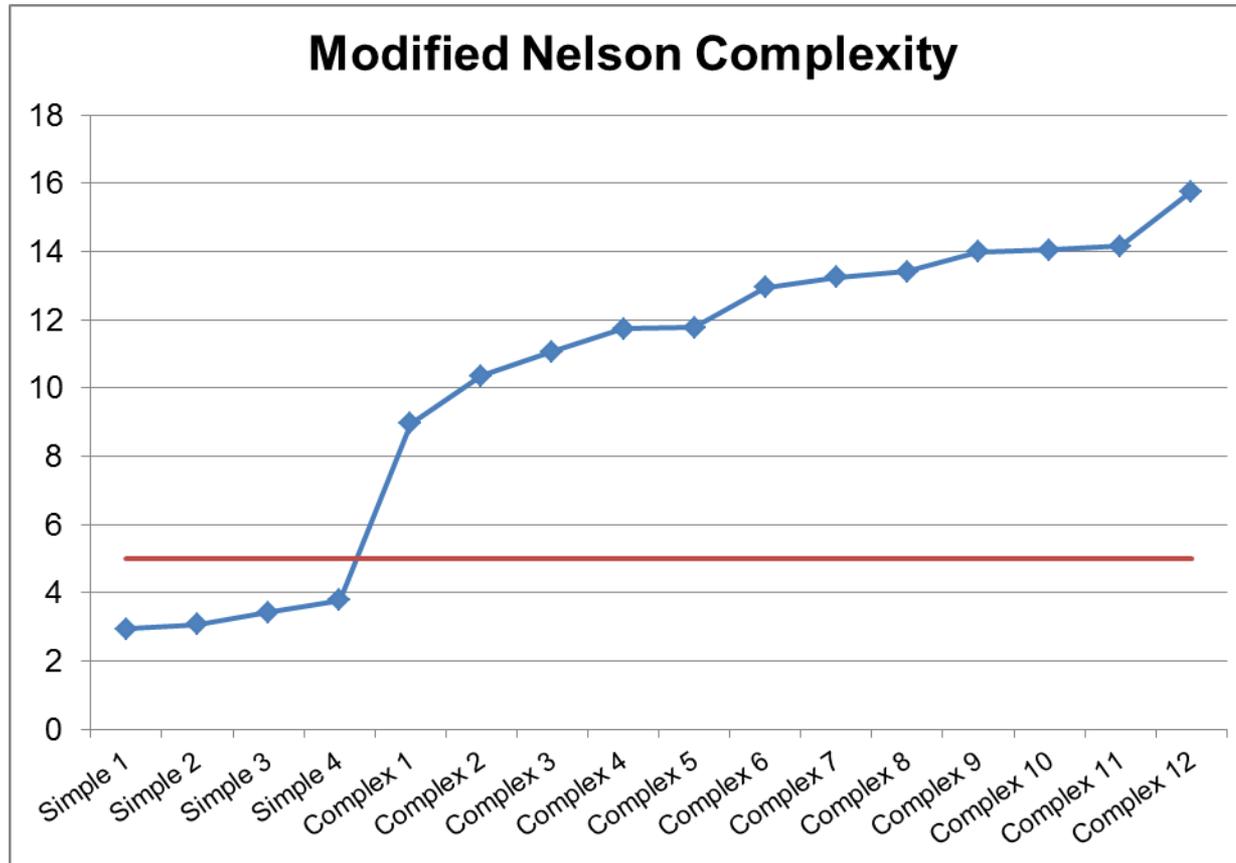
***Low Carbon Fuel Standard
Low Complexity – Low Energy
Use Refinery Provision***

June 20, 2013

Agenda

- Defining a low complexity – low energy use refinery
 - Modified Nelson Complexity
 - Total Annual Energy Use
- Options considered
 - Delayed entry
 - Credit
 - Separate baseline
- Preferred approach
 - “Last Margin to 2020”

Defining a Low Complexity - Low Energy Use Refinery

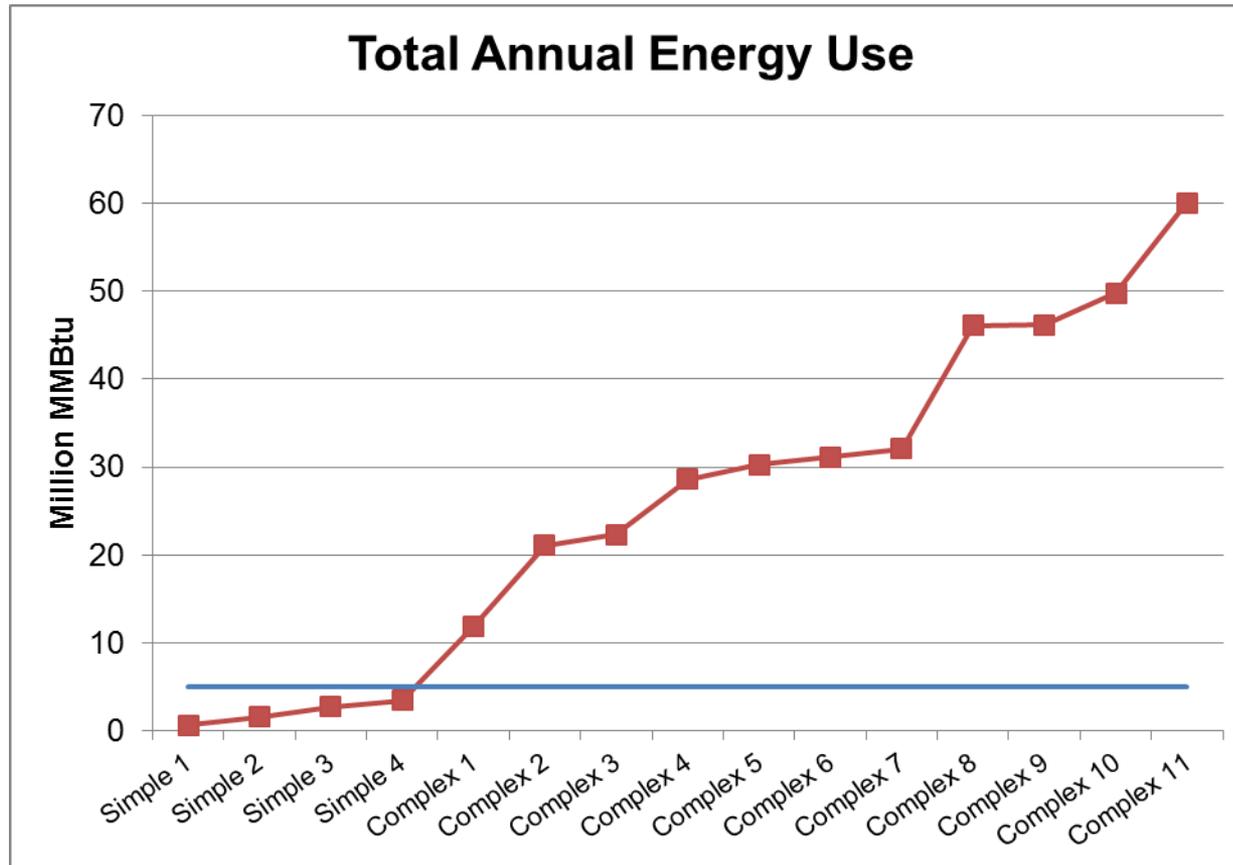


Modified Nelson Complexity

- Less than or equal to 5

Defining a

Low Complexity - Low Energy Use Refinery



Total Annual Energy Use

- Less than or equal to 5 million MMBtu per year

Options Considered

Delayed Entry

- Gasoline
 - Enters LCFS in 2018 or 2019
- Diesel
 - Enters LCFS in 2018

Options Considered

Credit for Gasoline and Diesel

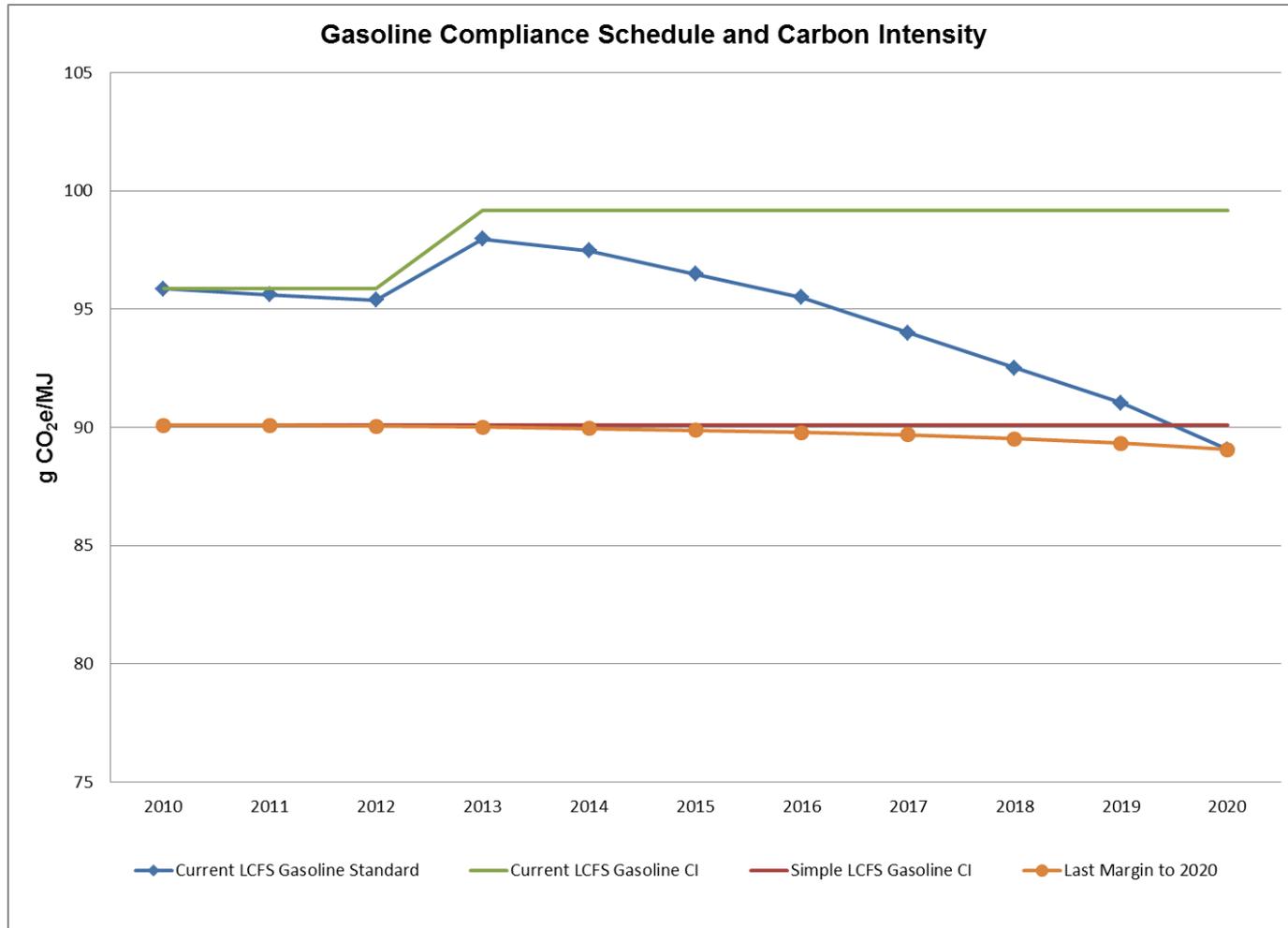
- 5 g CO₂e/MJ credit for diesel and gasoline

Options Considered

Separate Baseline

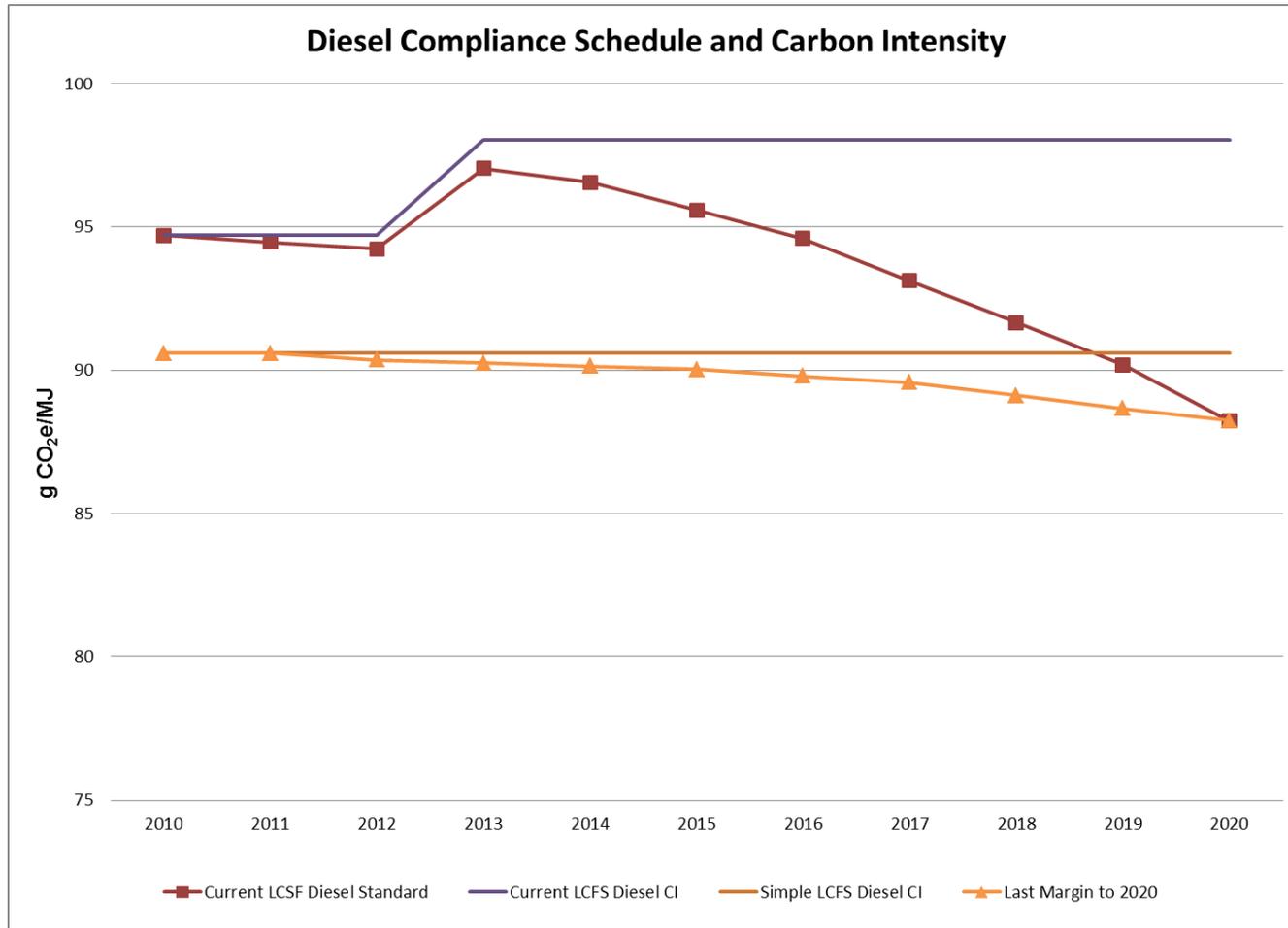
- Three different baselines
 - Separate Baseline with 10% reduction
 - Separate Baseline with 5% reduction
 - Separate Baseline with “Last Margin to 2020”

Preferred Approach



Gasoline Last Margin to 2020

Preferred Approach



Diesel Last Margin to 2020

Contact Information

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

Thank You