

# LCFS Dashboard

DRAFT – For Discussion Only

**March 8, 2016**  
**Sacramento, CA**

California Environmental Protection Agency  
 **Air Resources Board**

## Proposed Weekly Credit Transfer Activity Report Example

**Table 1. LCFS Credit Transfer Activity Report for the week of Jan. 3-10 2016 \***

Date Completed	Date Posted	Price \$/MT	Number	Total Price
4-Jan	21-Dec	\$120	50,000	\$6,000,000
4-Jan	22-Dec	\$50	2,000	\$100,000
4-Jan	23-Dec	\$75	10,000	\$750,000
5-Jan	23-Dec	\$120	2,000	\$240,000
5-Jan	23-Dec	\$120	500	\$60,000
5-Jan	23-Dec	\$115	1,000	\$115,000
6-Jan	28-Dec	\$120	5,000	\$600,000
6-Jan	28-Dec	\$120	20,000	\$2,400,000
6-Jan	28-Dec	\$100	5,000	\$500,000
7-Jan	28-Dec	\$120	10,000	\$1,200,000
7-Jan	28-Dec	\$120	1,000	\$120,000
7-Jan	28-Dec	\$120	500	\$60,000
8-Jan	29-Dec	\$110	10000	\$1,100,000
8-Jan	30-Dec	\$100	500	\$50,000
8-Jan	30-Dec	\$115	2,000	\$230,000
<b>TOTALS</b>		<b>Week Average Price</b>	<b>Week Total Credits</b>	<b>Week Total</b>
		<b>\$113.18</b>	<b>119,500</b>	<b>\$13,525,000</b>

\* Excludes 2 transfers of a total of 2,000 credits at a zero dollar price

# Proposed Dashboard Calculator: Estimated LCFS Premium for Low-CI Fuels

Select Compliance Year	CI Standard (gCO <sub>2</sub> e/MJ)	Select Fuel	Fuel Energy Density (MJ/gal)
2016 ▼	96.50	Denatured Ethanol ▼	81.51
	Gasoline Gallon Equivalent (MJ/GGE)	Select Fuel/Vehicle Combination	Energy Economy Ratio (EER)
Gasoline Substitute	115.83	Light/Medium Duty Gasol ▼	1.0

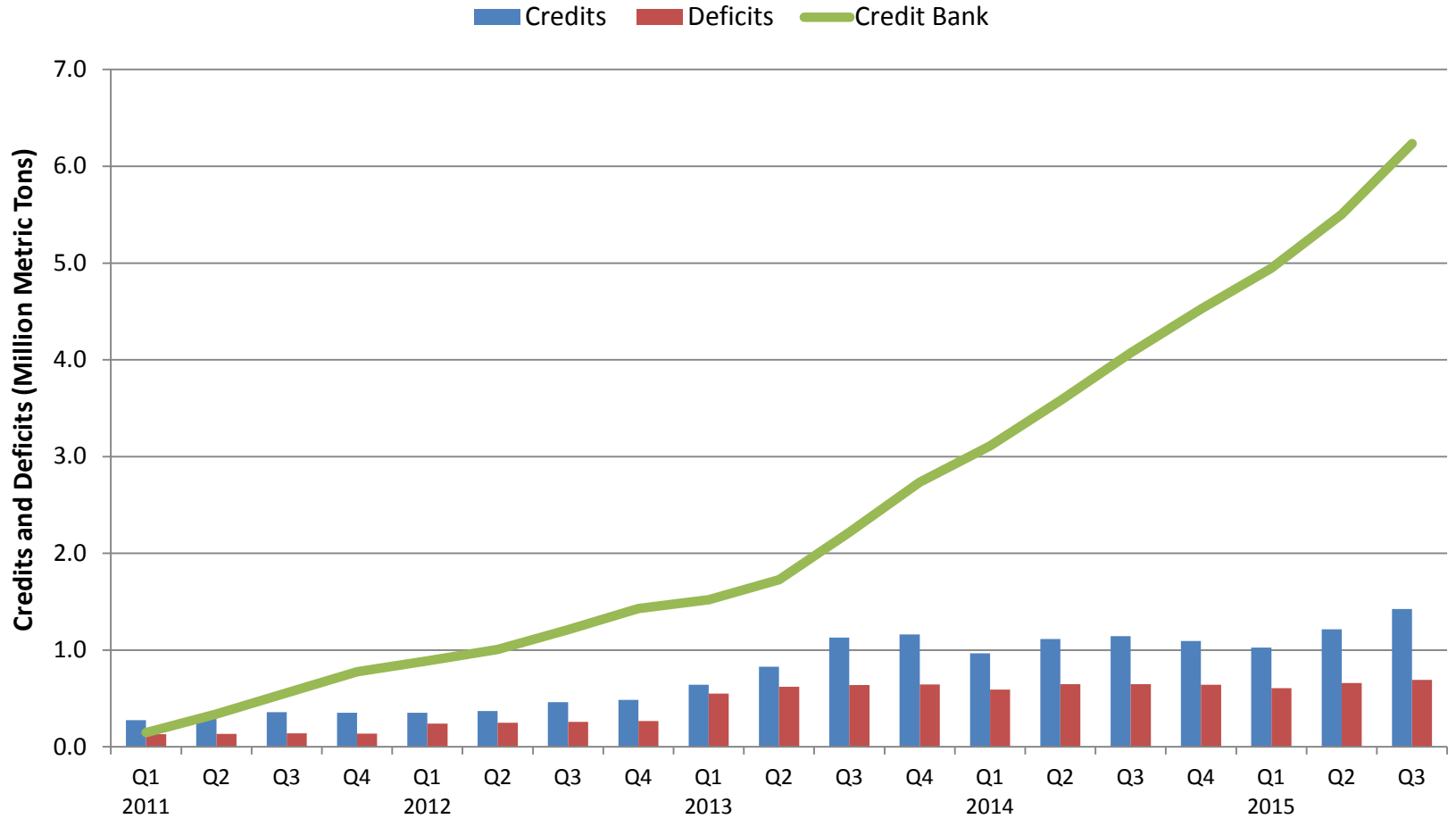
**Table I: Alternative Fuel Premiums at Sample LCFS Credit Prices  
(per GGE for fuels used as gasoline substitutes)**

CI Score (gCO <sub>2</sub> e/MJ)	Credit Price					
	\$60	\$80	\$100	\$120	\$150	\$200
0	\$0.67	\$0.89	\$1.12	\$1.34	\$1.68	\$2.24
10	\$0.60	\$0.80	\$1.00	\$1.20	\$1.50	\$2.00
20	\$0.53	\$0.71	\$0.89	\$1.06	\$1.33	\$1.77
30	\$0.46	\$0.62	\$0.77	\$0.92	\$1.16	\$1.54
40	\$0.39	\$0.52	\$0.65	\$0.79	\$0.98	\$1.31
50	\$0.32	\$0.43	\$0.54	\$0.65	\$0.81	\$1.08
60	\$0.25	\$0.34	\$0.42	\$0.51	\$0.63	\$0.85
70	\$0.18	\$0.25	\$0.31	\$0.37	\$0.46	\$0.61
80	\$0.11	\$0.15	\$0.19	\$0.23	\$0.29	\$0.38
90	\$0.05	\$0.06	\$0.08	\$0.09	\$0.11	\$0.15
<b>99.78 (Max pass-through for CARBOB)</b>	-\$0.02	-\$0.03	-\$0.04	-\$0.05	-\$0.06	-\$0.08

# Proposed Dashboard Figure

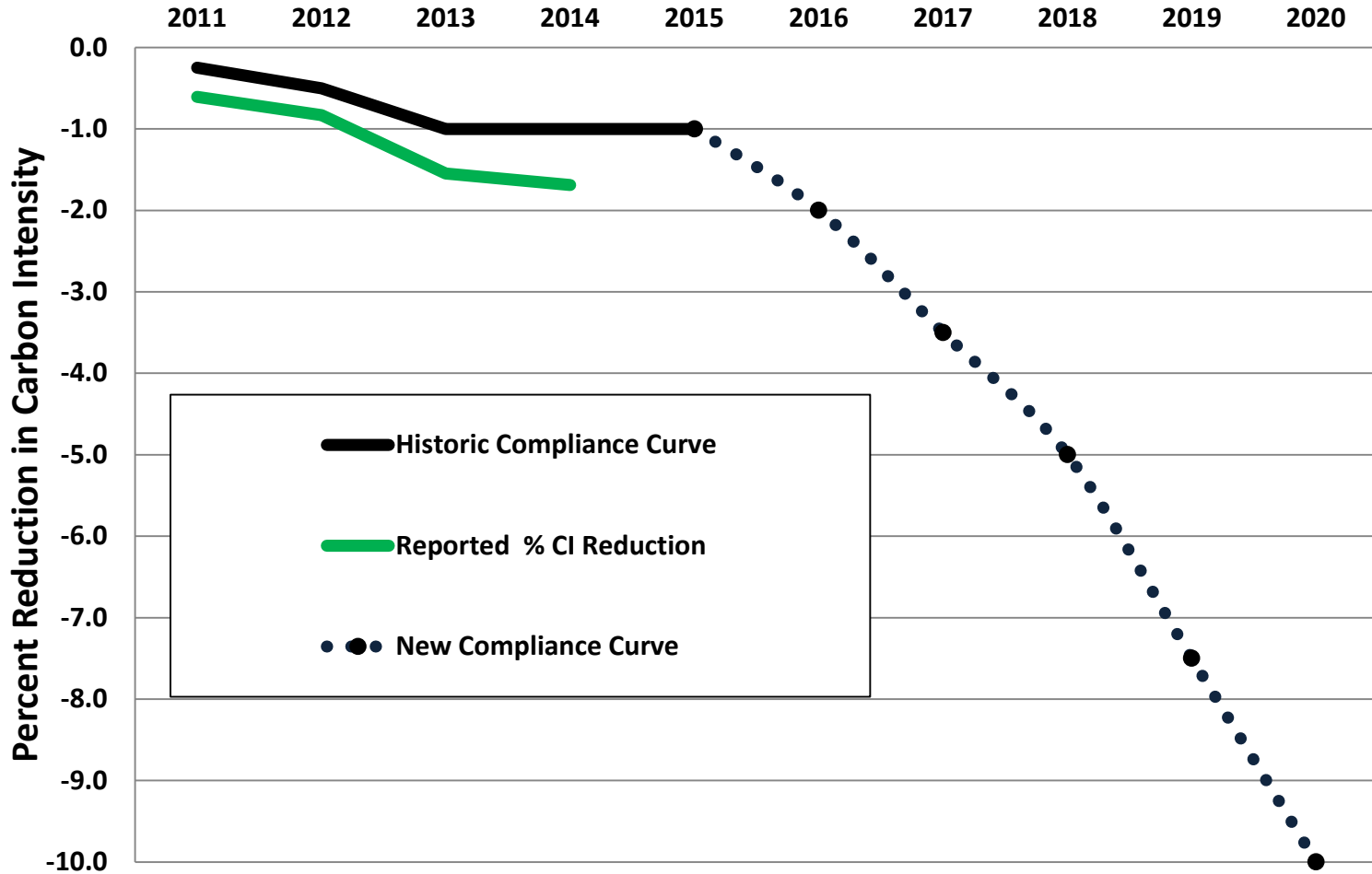
## Total Credits and Deficits for All Fuels Reported and Cumulative Credit Bank

### Q1 2011 – Q3 2015



# Proposed Dashboard Figure

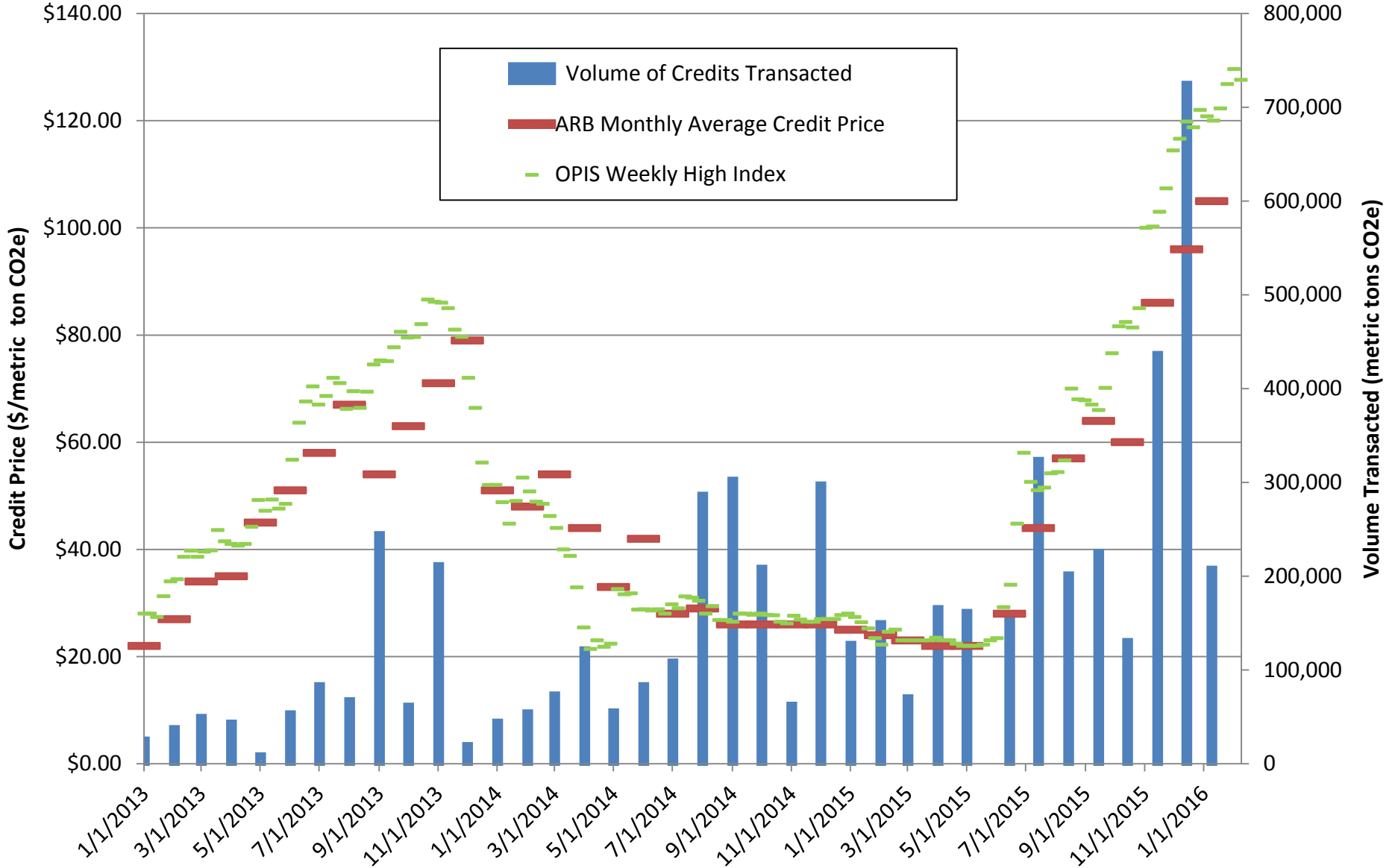
## 2011-2014 Performance of the Low Carbon Fuel Standard



Example uses carbon intensities based on composite of gasoline and diesel fuels

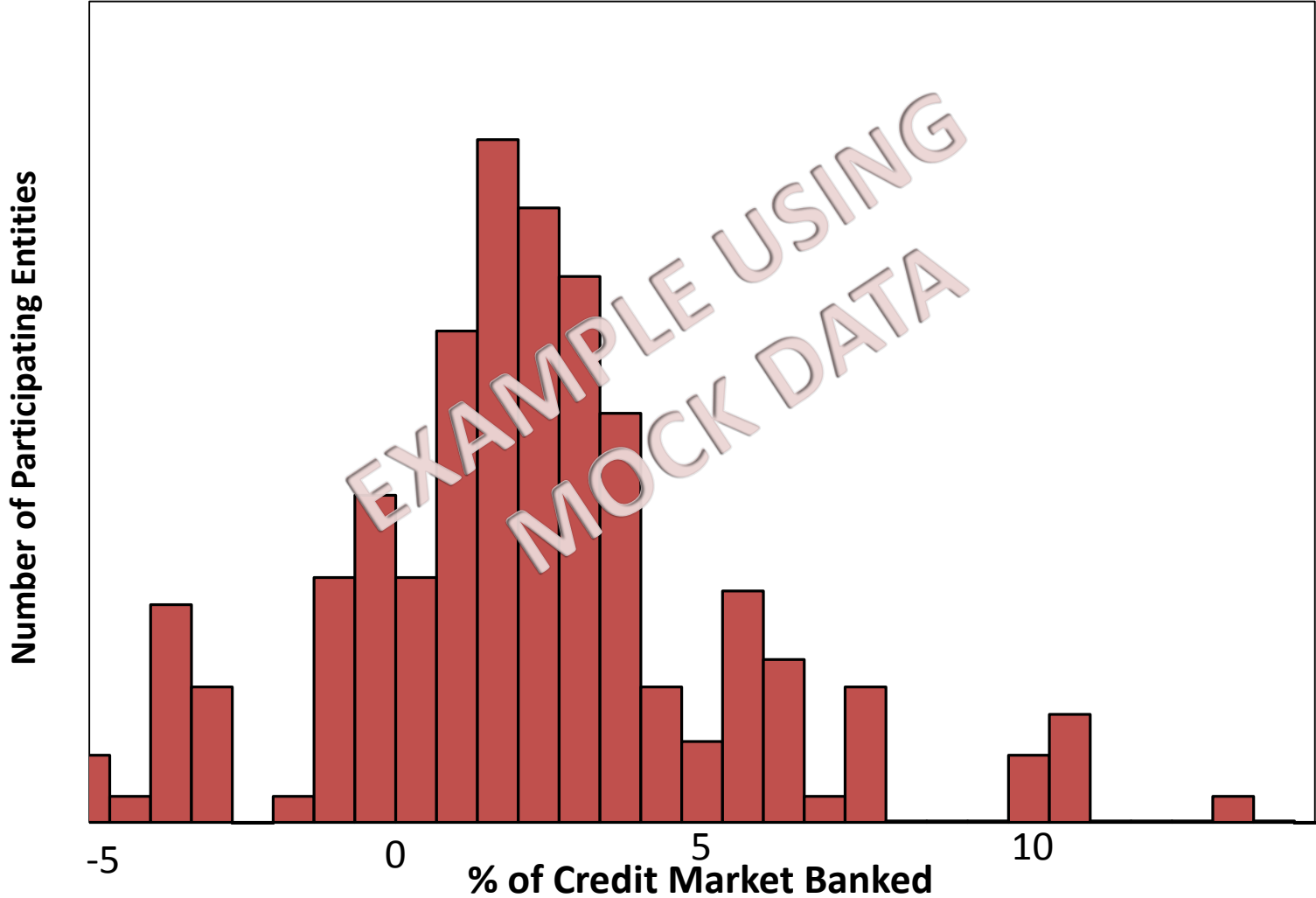
# Proposed Dashboard Figure

## LCFS Credit Price and Credit Transaction Volume (2013-2016)



# Proposed Dashboard Figure

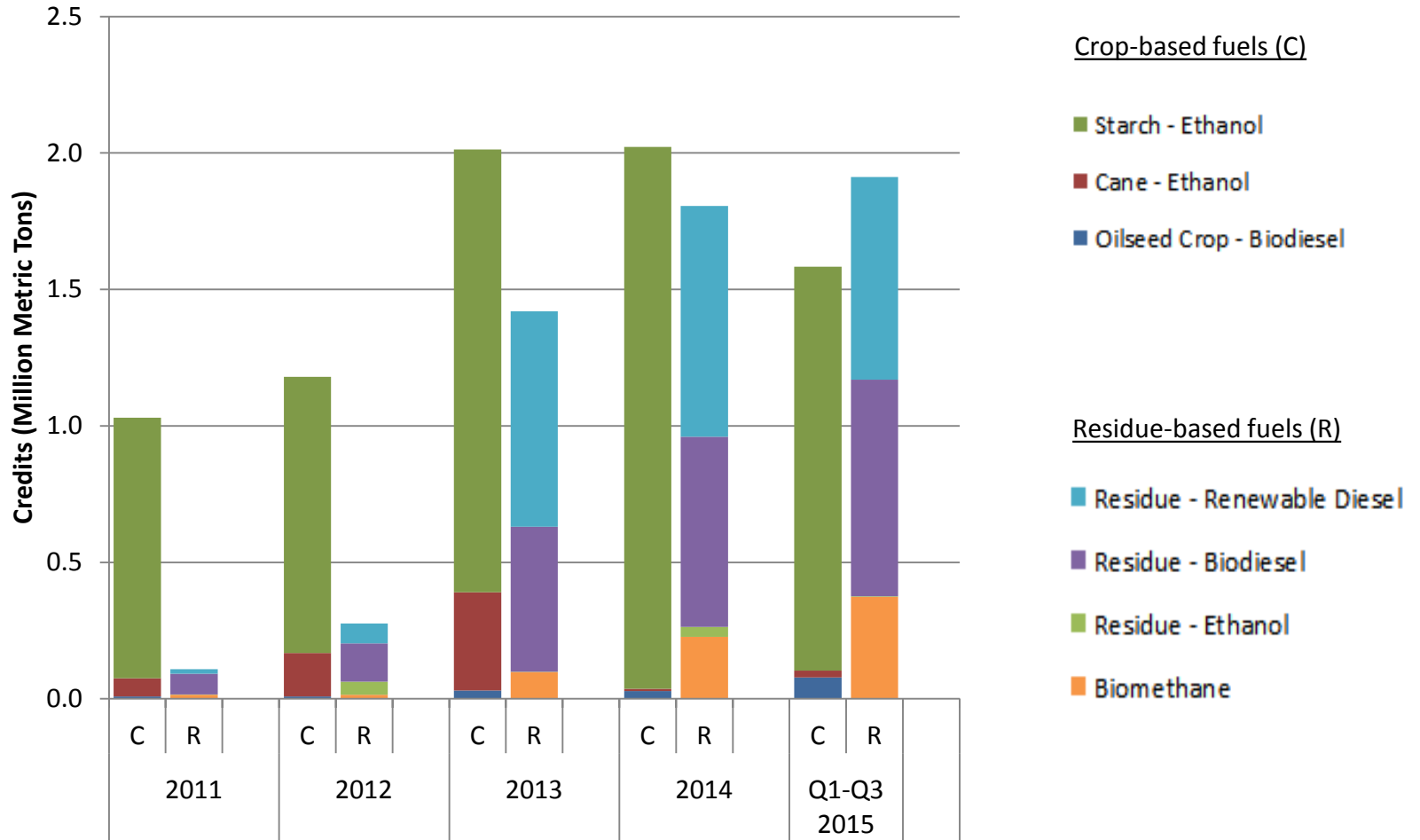
## Net Position Histogram



EXAMPLE USING  
MOCK DATA

# Proposed Dashboard Figure

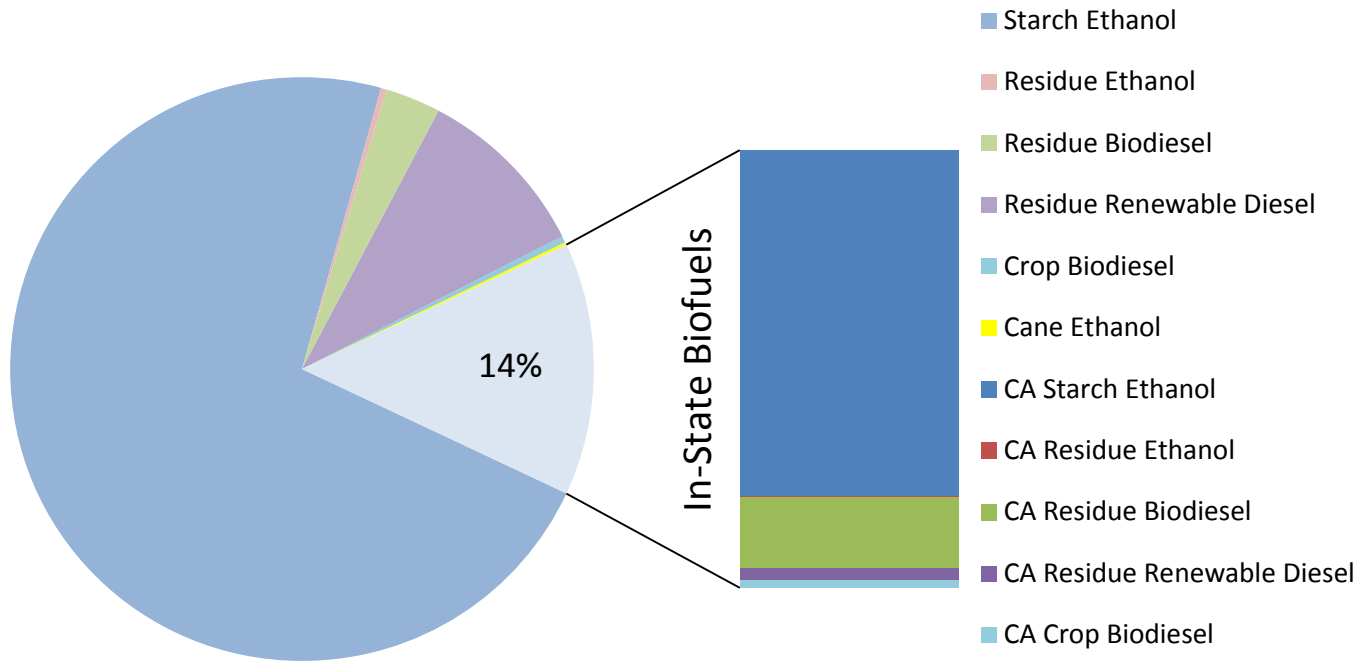
## Total Biofuel Credits by Feedstock Type: Crop or Residue (Q1 2011 – Q3 2015)





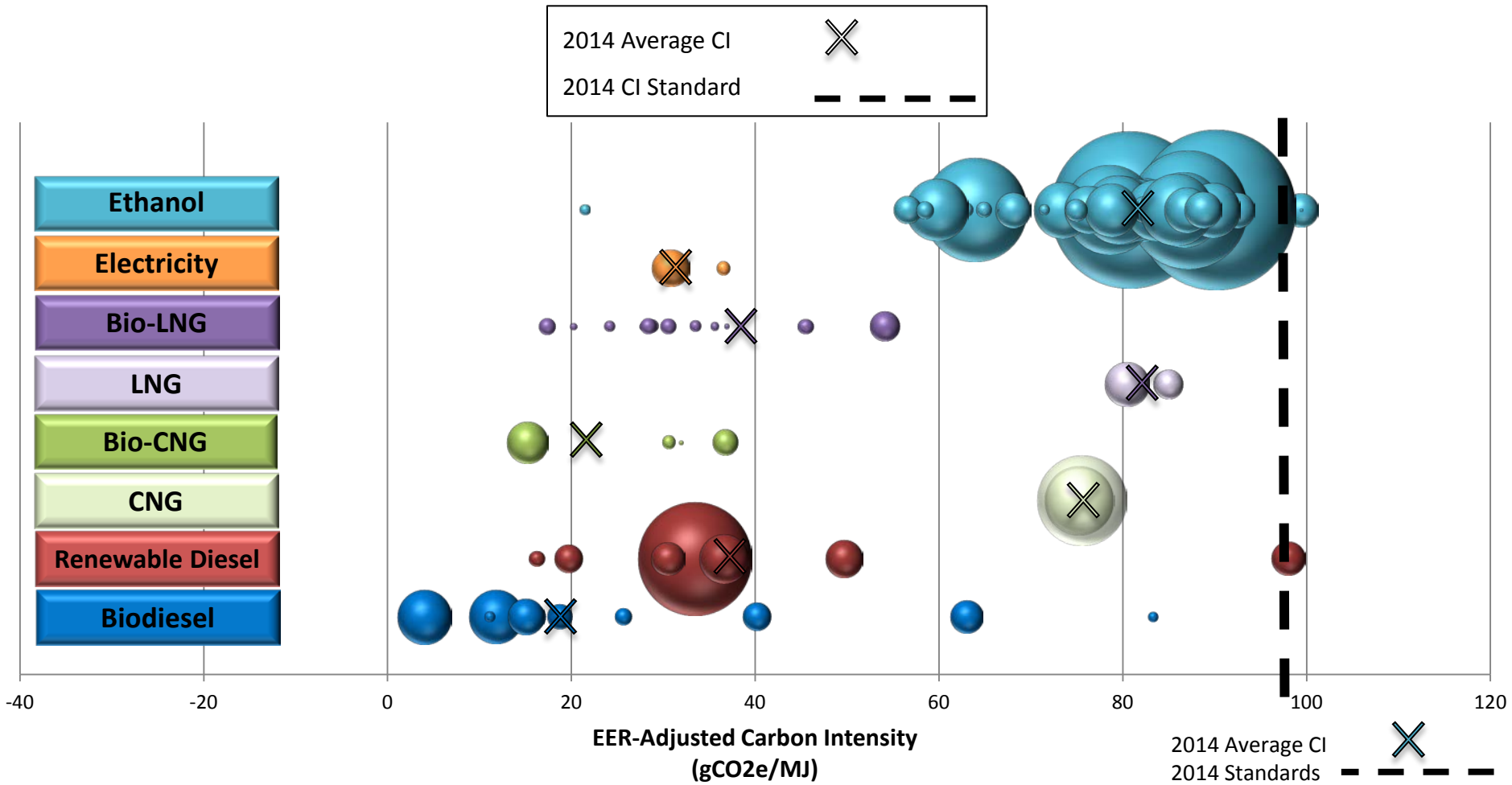
# Proposed Dashboard Figure

## 2014 Share of Liquid Biofuels Produced In-State by Volume



# Proposed Dashboard Figure

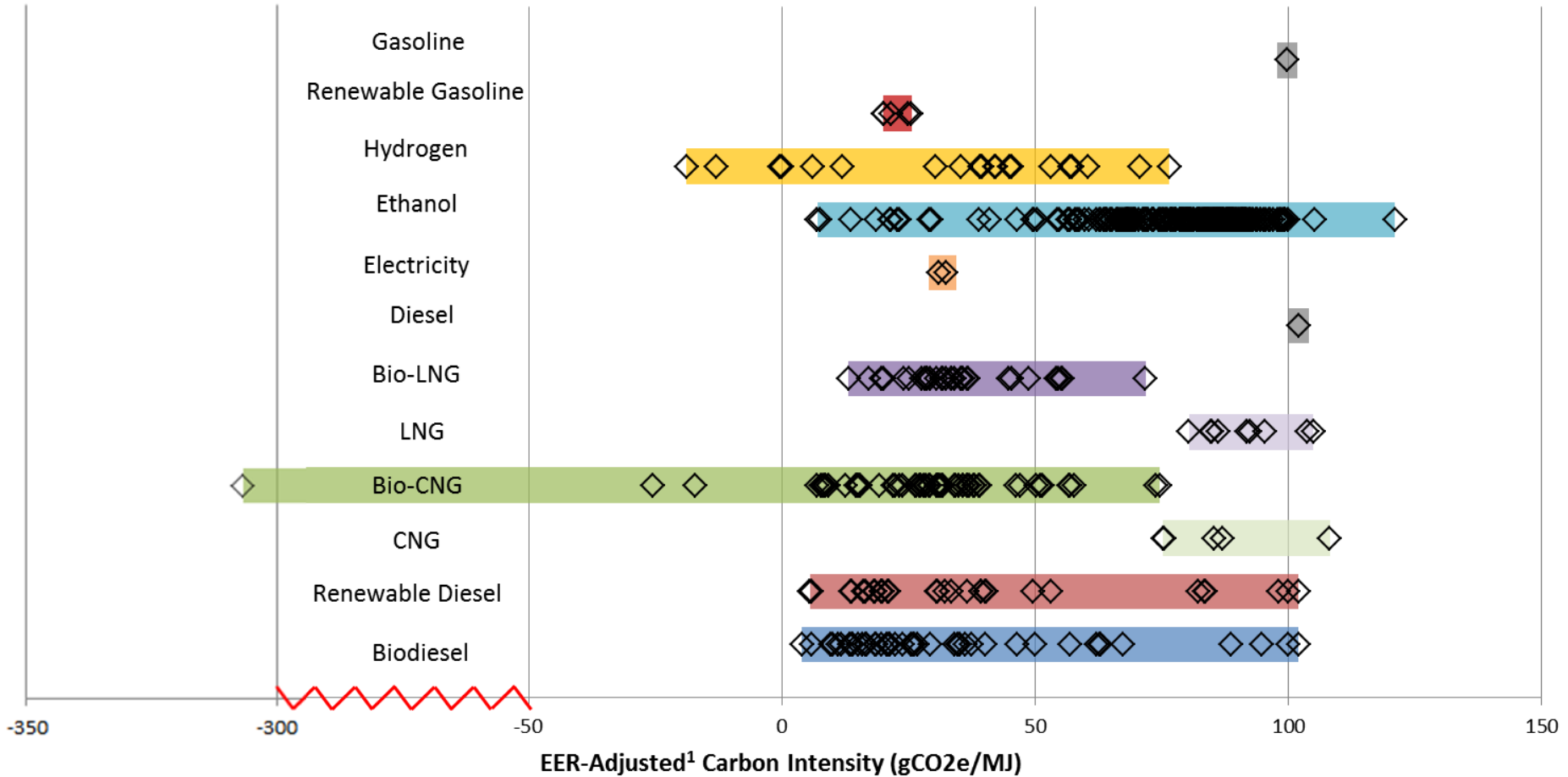
## 2014 Volume-Weighted Average Carbon Intensity by Fuel Type



<sup>1</sup> CI values are adjusted using the vehicle-fuel Energy Economy Ratio (EER) to an equivalent MJ of conventional fuel basis  $\left(\frac{CI_{alternative\ fuel}}{EER}\right)$ .

# Proposed Dashboard Figure

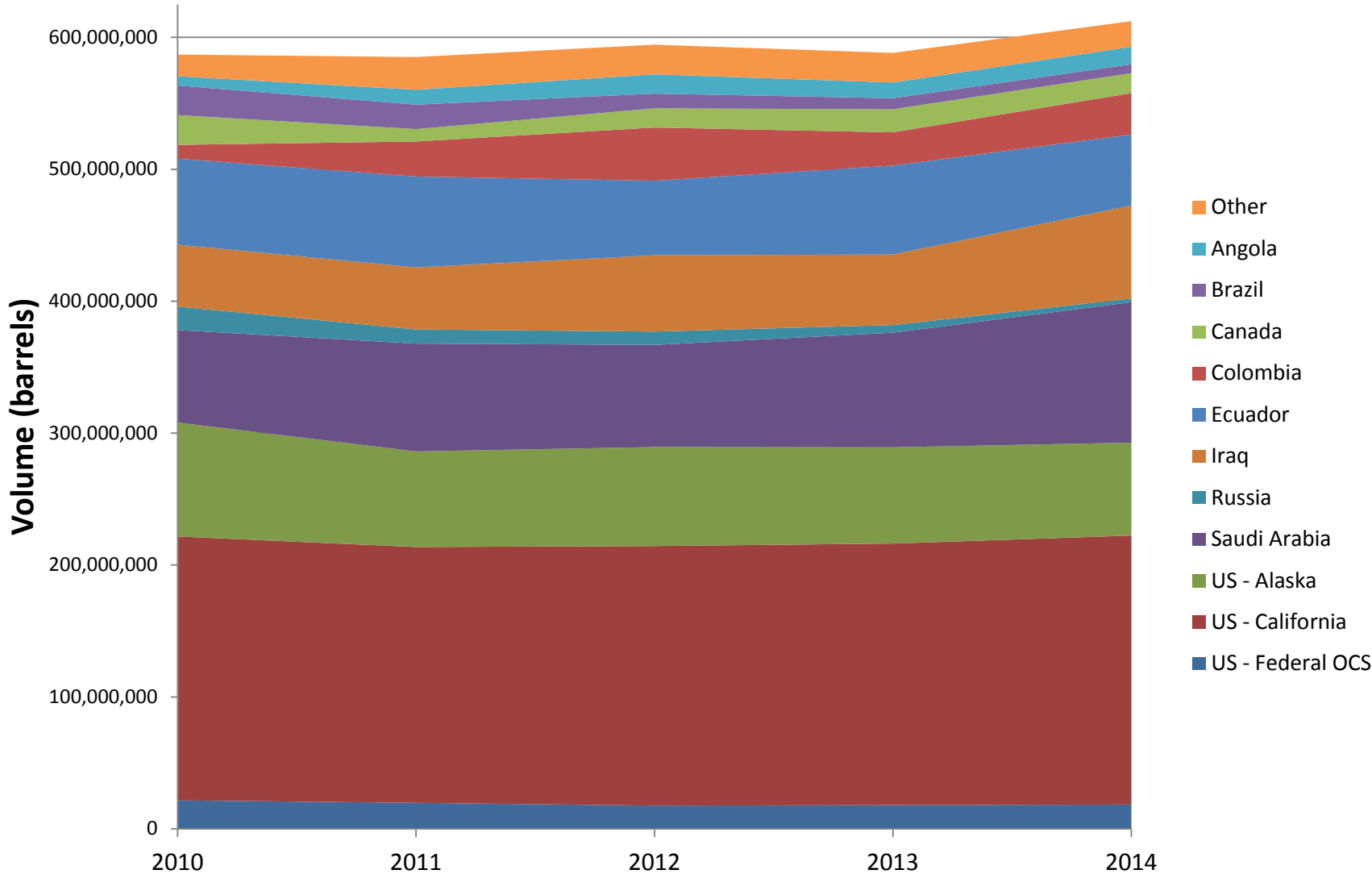
## Carbon Intensity Values of All Certified Pathways (2011-2015).



<sup>1</sup> The alternative fuel's CI value is divided by its Energy Economy Ratio (EER) in order to obtain the EER-adjusted CI value, representing the emissions which occur from the alternative fuel *per MJ of conventional fuel displaced*. EER values for all vehicle-fuel combinations are provided in Table 4 of the Final Regulation Order (2015).

# Proposed Dashboard Figure

## Major Sources of Crude Supplied to California



# Contact Information

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