API Meeting with OMB
2013 RFS Standards, Final Rule
July 22, 2013

Renewable Fuel Standard "RFS"

- The RFS is fundamentally flawed and has become unworkable for 2013 and beyond.
- EPA has the authority to fix some of the problems and needs to take action now.
- EPA needs to provide clear signals to the market on how the agency will address the blendwall.

Renewable Fuel Standard (RFS2) Recommendations

- The market needs consistent messages from EPA in a timely manner: avoid the E10 blendwall
- 2013 Final Rule – API comments submitted to EPA, April 2013
  - Reduce the Advanced and Total renewable fuel requirements so that the total ethanol volume does not exceed 10% of EIA's estimate for 2013 U.S. gasoline demand.
  - At a minimum, exercise existing discretion to reduce the advanced biofuel and total renewable fuel requirements by the corresponding amount that the cellulosic mandate is reduced.
  - Reduce the cellulosic volume to a reasonable estimate based on three months of actual production. Based on practically zero production in 2012, the 2013 cellulosic RVO should be set at zero.
- Propose (and finalize) 2014 RFS standards as soon as possible in a manner that makes 2014 feasible for all obligated parties. (This is the only sustainable approach!)
  - Set cellulosic standards at real production levels
  - Adjust advanced standards downward to reflect cellulosic reductions
  - Reduce total requirements by same amount.
  - Lock total ethanol obligations at 10% of gasoline pool
  - Depending on sugar cane ethanol from Brazil is problematic and this mandate should be eliminated
- 2015 and beyond-same rules as 2014 but note that since gasoline demand is projected to drop, total ethanol will drop also.

Annual RFS Standards Need to be Issued On Time

- July 2013 is excessively late for EPA to be finalizing 2013 requirements; statutory deadline was November 30, 2012.
- The 2014 biomass based diesel standard should have been finalized by October 31, 2012. EPA has not issued a proposal yet.
- The 2014 RFS requirements need to be proposed now and finalized by November 30, 2013.
- The 2015 RFS standards need to be finalized as soon as possible.
- EPA needs to be sending correct and consistent messages as early as possible and needs to give the market sufficient time to adjust.

2013 Renewable Fuel Standard

- RFS2 problem areas
  - Most non-corn biofuel production (Advanced and Cellulosic) is far below mandated levels
  - E10 blendwall is at hand
    - Gasoline demand has dropped rather than risen as was expected in 2007 when EISA was enacted
    - Since the vast majority of RFS2 biofuels is some form of ethanol, ethanol placement has become problematic
    - Currently there is greater demand for E0 than for E85
  - Diesel has a large ethanol requirement but this ethanol cannot be blended in the diesel pool.
  - RINs have a two year life, so RFS2 fixes need to be multi-year not one year at a time.

RINs are Permits

- RINs are permits to supply gasoline and diesel for US consumption
  - Availability of RINs depends on consumption of renewable fuels in US transportation fuels, not the production of renewable fuel. As the mandates exceed the ability of the US gasoline and diesel pools to consumer the renewable fuels, RINs will become in short supply, which will in turn limit supply of gasoline and diesel for US consumption.
  - The point has been reached where the mandated ethanol volumes can not be incorporated into the US gasoline pool.
  - Therefore, refiners/obligated parties lack the capability to produce sufficient RINs to meet their RVOs
  - Refiners must therefore purchase RINs in order to be able to produce incremental gasoline and diesel. These RINs come from RIN producers (biofuel blenders, etc) or carryover RINs.
  - Without sufficient RINs refiners can't supply enough gasoline or diesel for domestic use. This also applies to importers.
  - The price for the required basket of RINs becomes in effect a tax on domestic gasoline and diesel production.

Obligated Parties are RIN Purchasers

- Refiners & other Obligated Parties in general do not generate RINs
- Blenders and marketers obtain RINs when they purchase and blend biofuels.
  - 95% of retail stations are owned by independent business owners and *not* by refiners.
  - Most current retail stations can't handle ethanol blends above E10 without major infrastructure investments.
  - Increased RIN prices are sending the right market signal about the blendwall but the markets will need years to respond to the current signals and the rapidly increasing annual mandates will require even more time.

E10 Blendwall is at Hand

- Without any RIN Carry forward from 2013 to 2014, the E10 blendwall is reached in 2014.

	2013	2014	2015	2016
Total RFS2	16.55	18.15	20.50	22.25
Biomass based Diesel-ethanol equiv RINs	1.94	1.94	1.94	1.94
Mandated Ethanol	14.61	16.21	18.56	20.31
EIA Gasoline Forecast billion gal	126.96	124.14	123.25	122.51
E10 ethanol billion gal	12.70	12.41	12.32	12.25
Annual RIN excess (shortfall)	-1.91	-3.80	-6.24	-8.06
Carryover RINs from previous year	2.59	0.67	0.00	0.00
Total Net RINS	0.67	-3.13	-6.24	-8.06

* These values are used for illustrative proposes and can change based on assumptions.

E10 Blendwall is at Hand Continued (1)

- RINs are not equally distributed among all obligated parties.
- With obligated parties trying to carry forward 20% of their 2014 RIN obligation and insufficient RINs available to accomplish this, the effects of the E10 blendwall will be felt in 2013 by some obligated parties.
- The RIN carryover is not a solution to the blendwall; EPA should lower the 2013 standards to help with the worsening situation in 2014 and beyond
- In 2014 there will be insufficient RINs - obligation can't be met.
  - E85 and Biomass-based diesel production can't expand fast enough to cover the shortfall.
- 2015-Ditto-at least ~33% of obligations can't be met.

E10 Blendwall is at Hand continued (2)

Billions of RIN-gallons per year	2013	2014	2015	2016
Total RFS2	16.55	18.15	20.50	22.25
Biomass based Diesel-ethanol equiv RINs	1.94	1.94	1.94	1.94
Mandated Ethanol RINs	14.61	16.21	18.56	20.31
EIA Gasoline Forecast	126.96	124.14	123.25	122.51
E10 ethanol	12.70	12.41	12.32	12.25
Annual RIN excess (shortfall)	-1.91	-3.80	-6.24	-8.06
Carryover RINs from previous year	2.59	0.67	0.00	0.00
Total Net RINS	0.67	-3.13	-6.24	-8.06
20% Carry forward RINs	3.24	3.71	4.06	
Additional E85 Required billions of gallons		-4.24	-8.54	-11.04
Additional Biomass-based Diesel billion gall		-2.06	-4.16	-5.37

* These values are used for illustrative proposes and can change based on assumptions.

One Year Deficit Carryover is Not a Solution

- Carrying a deficit for a year is not a solution because the regulations require for the deficit to be made up in the following year along with the new obligations for that year.
- With the mandated obligations increasing rapidly each year, there is no hope of ever recovering from an obligation deficit

RFS Diesel Problem

- The vast majority of RFS biofuels are ethanol.
- Diesel has an RFS obligation but does not have the ability to be blended with ethanol.
- After the blendwall is reached, E10 blending provides sufficient RINs to meet the obligation on gasoline but there are insufficient RINs to cover both gasoline and diesel. As a result refiners want to produce less RFS obligated diesel. Eventually the RFS obligations for ethanol become so large that the gasoline pool can't even cover its own obligations.
- As the RFS obligations increase, the desirable ratio of gasoline to diesel production tilts more away from diesel each year.
- RFS compliance will thus drive greater diesel reductions than gasoline reductions.

Renewable Fuel Standard (RFS2) Recommendations

- EPA should send consistent messages to the market in a timely manner: avoid the E10 blendwall
- 2013 Final Rule – API comments submitted to EPA, April 2013
  - Reduce the Advanced and Total renewable fuel requirements so that the total ethanol volume does not exceed 10% of EIA's estimate for 2013 U.S. gasoline demand.
  - At a minimum, exercise existing discretion to reduce the advanced biofuel and total renewable fuel requirements by the corresponding amount that the cellulosic mandate is reduced.
  - Reduce the cellulosic volume to a reasonable estimate based on three months of actual production. Based on practically zero production in 2012, the 2013 cellulosic RVO should be set at zero.
- Propose (and finalize) 2014 RFS standards as soon as possible in a manner that makes 2014 feasible for all obligated parties. (This is the only sustainable approach!)
  - Set cellulosic standards at real production levels
  - Adjust advanced standards downward to reflect cellulosic reductions
  - Reduce total requirements by same amount.
  - Lock total ethanol obligations at 10% of gasoline pool
  - Depending on sugar cane ethanol from Brazil is problematic and this mandate should be eliminated
- 2015 and beyond-same rules as 2014 but note that since gasoline demand is projected to drop, total ethanol will drop also.