

API Meeting with OMB
on 2014 RFS
September 23, 2013

Renewable Fuel Standards (RFS)

- The RFS is fundamentally flawed and has become unworkable.
- 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.

2013 Renewable Fuel Standards Issues

- Rulemaking timing
 - Retroactive standards
 - Use of data beyond statutory requirements resulting in significant change to standards
- Recognizes ethanol blendwall problem
 - Did not provide the needed clarity
- EPA did not exercise its authority to:
 - Waive advanced commensurate with the cellulosic reduction
 - Waive the overall mandates to keep ethanol below 10%
- Relies on carryover RINs to ensure compliance
- Set cellulosic volumes at aspirational levels
- Small refinery exemption
 - Lack of transparency
 - Inappropriate reallocation

Annual RFS Standards need to be issued on time

- EPA needs to be sending the correct messages as early as possible and needs to give the market time to adjust
- The 2014 RFS requirements need to be finalized by November 30, 2013
- The 2015 RFS standards need to be finalized as soon as possible, no later than November 30, 2014
 - EPA should discuss its intent in 2014 standards

2014 Renewable Fuel Standards

- 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
 - 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
 - The point has been reached where the mandated ethanol volumes can not be incorporated into the US gasoline pool.
 - Therefore, nearly all refiners/obligated parties lack the capability to acquire sufficient assigned RINs to meet their RVOs
 - Refiners must therefore purchase separated RINs in order to be able to produce incremental gasoline and diesel. The problem is that RINs for compliance are dependent on consumption of renewable fuels in the US transportation system. As the mandates exceed the ability of the vehicles and infrastructure to consume the renewable fuels, RINs will be in short supply.
 - 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. But, then it gets even worse, as the availability of RINs limits gasoline and diesel supplies. Refiners and importers can only legally supply as much gasoline and diesel for US consumption as they have RINs to meet the obligation that supplying such fuel incurs.

Refiners/Obligated Parties are RIN purchasers

- Refineries do not generate RINs
 - RINs for compliance depend on biofuel consumption in U.S. transportation
- Renewable fuel producers, blenders and marketers supply the RIN markets
 - 95% of retail stations are not owned by refiners but by independent business owners
 - Most current retail stations can't handle ethanol blends above E10 without major infrastructure investments
 - Several states mandate the availability of unblended gasoline, limiting obligated party blending opportunities

E10 blendwall is at hand

- RINs are not equally distributed among obligated parties
- RINs in 2013 are insufficient, therefore E10 blendwall effects will be felt by some obligated parties.
- In 2014, RINs will be insufficient to meet the annual obligation
 - E85 and Biomass-based diesel production can't expand fast enough to cover the shortfall.
 - Total requirements need to be reduced by 3.35 bgy or more (see API/AFPM Waiver Request)
- In 2015, problem continues and at least 30 % of obligations can't be met.

E10 blendwall is at hand*

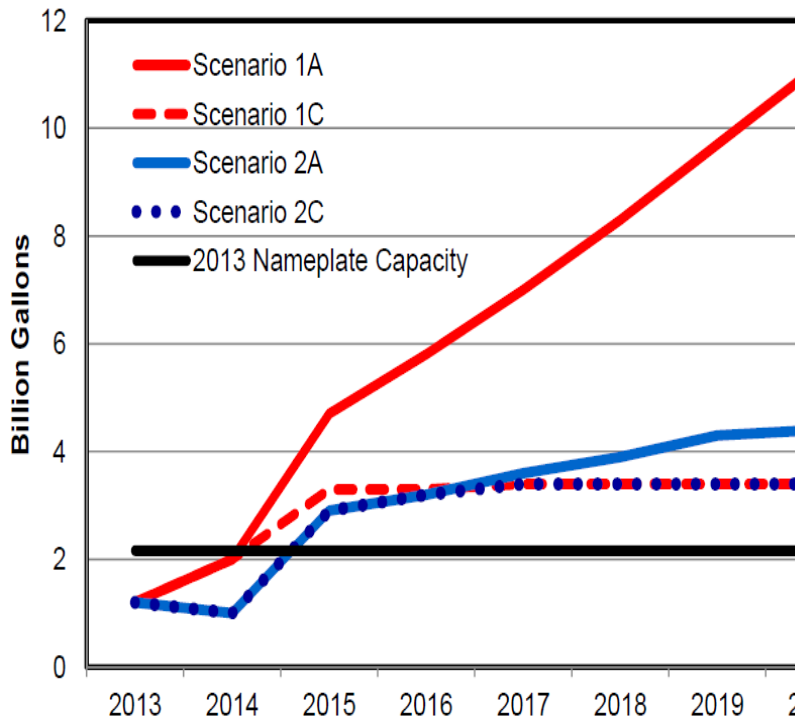
Billions of RIN-gallons per year	2013	2014	2015	2016
Total RFS2	16.55	18.15	20.5	22.25
Biomass based Diesel-ethanol equiv RINs	1.92	1.92	1.92	1.92
Mandated Ethanol	14.63	16.23	18.58	20.33
EIA Gasoline Forecast billion gal	127.0	124.1	123.3	122.51
E10 ethanol billion gal	12.7	12.41	12.32	12.25
Annual RIN excess (shortfall)	-1.93	-3.82	-6.26	-8.08
Carryover RINs from previous year	2.59	0.66	0	0
Total Net RINS	0.66	-3.16	-6.26	-8.08
Total Net RINs plus 20% carry forward RINs	-2.97	-7.26	-10.71	-12.88

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

E85 and Increased Biodiesel use not viable compliance options

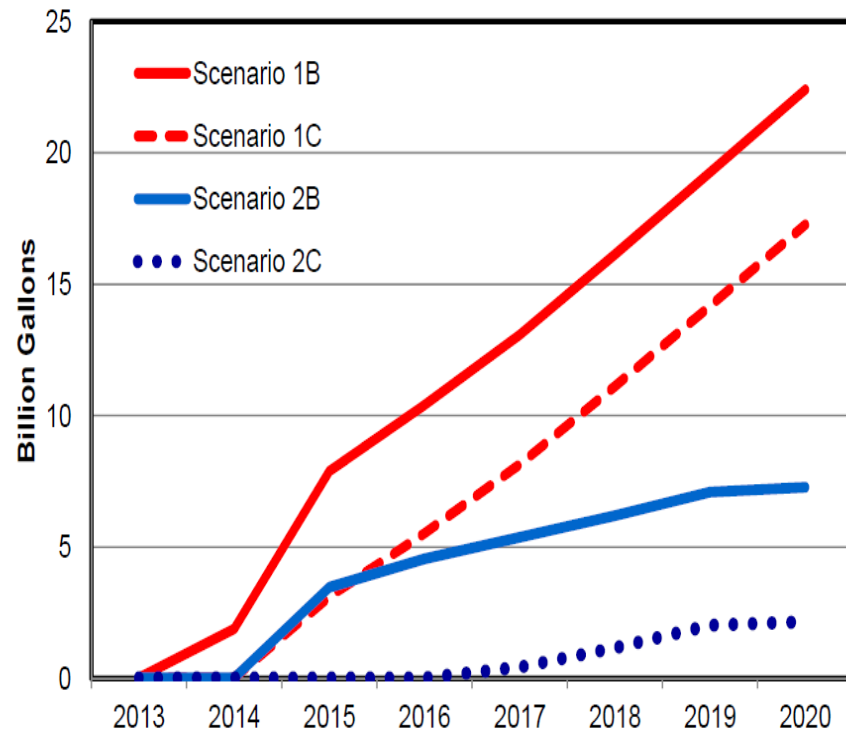
- MathPro assessed compliance approaches for various schedules of annual renewable fuel volumes that EPA might establish
 - Scenario 1: RFS mandated volumes
 - Scenario 2: Mandate with EIA cellulosic projections

Exhibit 4: FAME Volume, by Scenario



Note: 2013 nameplate capacity from EIA website.

Exhibit 5: E85 Volume, by Scenario



Note: E85 use in 2012 was on the order of 0.1 B gallons (AEO 2013).

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
- Unless EPA reduces the overall mandated ethanol volumes, future RIN prices should increase year on year and moving a deficit into the next year should be more expensive than meeting current year requirements

RFS Diesel Problem

- About 89% of the 2014 RFS required biofuels are ethanol.
- Diesel has the same RFS obligation as gasoline but does not have the ability to be blended with ethanol. Diesel constitutes about a third of all obligated gallons but only contributes ~11% of the mandated RINs.
- Thus on an overall basis gasoline must generate about half of the RIN's that are required for diesel compliance. In 2014, after the blendwall is reached, E10 blending provides sufficient RINs to meet the obligation on the gasoline pool but there are insufficient RINs to cover both the gasoline and the diesel pools. As a result refiners are driven to produce less RFS obligated diesel.
- As the RFS obligations increase, the ethanol requirements increase faster than the biomass-based diesel requirements. Since every gallon of diesel fails to contribute sufficiently to the total RIN obligation, it becomes less desirable to produce diesel under the RFS.

Renewable Fuel Standards Recommendations

- The 2014 RFS requirements will likely affect RIN prices through the end of 2013. At the beginning of 2014, 2015 RFS requirements will likely begin to affect RIN prices.
- Significant reductions in the total and advanced categories will be needed to send the correct message to the RIN markets to help keep RIN prices reasonable.
 - The API / AFPM waiver request is the appropriate vehicle to achieve the reductions
- Finalize 2014 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.
 - Establish ethanol obligations at no more than 9.7% of gasoline pool
 - Set biomass-based diesel standard at 1.28 billion gallons (equivalent to 1.92 billion RINs).
- Propose and finalize 2015 and beyond RFS standards on time. Adopt the same rules as 2014. Note that since gasoline demand is projected to drop, total ethanol will likely drop also.

API-AFPM Waiver Request to EPA

- On 8/13/13, API-AFPM submitted to EPA a petition for a partial waiver of 2014 volumes.
- Section 211(o)(7)(A) of the Act requires notice and comment before the Administrator may grant a waiver of the RFS volume requirements.
- API and AFPM urge EPA to take comment concurrently on the waiver request and the 2014 Volumes proposal and respond to the waiver request and issue a final 2014 Volumes rule by November 30, 2013.