

**RENEWABLE IDENTIFICATION NUMBERS (RINS)  
TRADING UNDER THE RENEWABLE FUELS PROGRAM:  
UNINTENDED CONSEQUENCES FOR SMALL RETAILERS**

Prepared by Bernard L. Weinstein, Ph.D.

for the Small Retailer Coalition

Maguire Energy Institute

Cox School of Business

Southern Methodist University

Dallas, Texas

August 2016



## **INTRODUCTION AND BACKGROUND**

More than a decade ago, in an effort to decrease imports, reduce greenhouse gas emissions, and enhance America's energy security, Congress passed the Energy Policy Act of 2005. Among other provisions, this legislation created a national Renewable Fuel Standard (RFS) mandating the blending of renewable fuels—such as ethanol—into gasoline and diesel. Each year, the Environmental Protection Agency (EPA) sets a blending target known as the renewable volume obligation (RVO). For example, in 2010, the EPA directed that 12.9 billion gallons of ethanol and other biofuels be blended into gasoline and diesel. By 2016, the amount had jumped to 18.1 billion gallons and the proposed RVO requirement for 2017 is 18.8 billion gallons. Since the law was passed, ethanol's share of the U.S. gasoline mix has increased from less than three percent to nearly 10 percent.

In addition, Congress directed the EPA to generate a system of tracking numbers that could be used to ensure that mandated blending requirements were being met by the "obligated parties." Curiously, the "points of obligation" are refineries and gasoline-diesel importers, not the actual parties doing the blending.

These 38-character tracking numbers, sometimes called "credits," are known as RINs (renewable identification numbers). A RIN is assigned to each physical gallon of renewable fuel produced or imported and follows that gallon as it is transferred to a fuel blender. After blending, RINs are separated from the blended gallons of gasoline and diesel, and they are used by obligated parties as proof they have met their mandated volumes. Importantly, obligated parties may sell RINs to one another or to "non-obligated" parties (see discussion below). For

example, if Refiner A has fulfilled its annual RFS requirement but continues to buy and blend renewable fuels, it can sell excess RINs to Refinery B or to an oil importer who has not purchased sufficient renewable fuels to meet its RFS requirement.

## **GAMING THE SYSTEM: SOME UNINTENDED CONSEQUENCES OF THE RENEWABLE FUELS**

### **STANDARD AND RINS TRADING**

RINs trading has become a huge business. For example, in 2014 the EPA reported more than 50 billion RIN sales transactions, with 30 billion transacted by non-obligated parties. In theory, allowing refineries and importers to buy or sell RINS makes economic sense. What's more, market trading can help facilitate the realization of EPA's annual RVO requirements. But because the entities actually blending renewable fuels into gasoline and diesel are not the "obligated parties," many retailers find themselves at a competitive disadvantage.

#### *How the fuel market actually works*

The retail fuel market in the U.S. is comprised of three types of companies: (1) convenience stores, who sell more than 80 percent of all fuels; (2) high volume hypermarkets like Walmart, Kroger and Costco, who sell about 14 percent of all motor fuel; and (3) traditional service stations and marinas who account for about 6 percent of retail fuel sales.

About half of America's 152,000 fueling stations sell "branded" gasoline and diesel refined or imported by the 15 major oil companies. A branded retailer must purchase fuel from a branded supplier or distributor and can't shop around for lower-priced fuel that might

increase its margins or be passed on to consumers through lower prices. The other half of the nation's fueling stations are independents selling "unbranded" gasoline and diesel. Independents have the advantage of being able to seek lower priced fuel, often on the spot market, which in turn affords consumers lower prices. Large retailers sell both branded and unbranded fuel while most small retailers sell branded fuels only.

Finished gasoline and diesel containing varying amounts of renewable fuel are purchased by retail stations from petroleum marketers or wholesalers who do the actual blending. For branded retail stations the blending specifications are controlled by the brand owner –e.g. Shell, Exxon, etc. Unbranded retail stations typically don't have any specific blend specifications. However, as discussed above, the point of obligation for RINs is the refiner or the importer of petroleum, even though the blending occurs downstream. Indeed, some large retailers do their own blending.

### *Gaming the system*

And here's where the market distortions come into play. Since the RVOs apply to refiners and importers, and not to other entities that control blending, "non-obligated parties" can game the system. For example, companies like Circle K, Sheetz and other large retailers have been increasing their market share by taking ownership of fuels at the blending point and acquiring RINs they can sell at a profit, thereby generating additional revenues that allow them to undercut their competitors' retail prices. In practice, only these large retailers have the financial resources to participate in RINs trading; small retailers have neither the capital nor the market leverage to take positions in RINs trading.

Fuel blending entails costs in the millions of dollars, in particular the financial ability to purchase bulk quantities of gasoline and diesel blendstocks as well as ethanol and other biofuels. In addition, costs are entailed for terminal and pipeline services to move cargo to the blending location. Only large retailers can cover these expenses; but the profits from RIN trading can more than offset these costs.

For example, in its 2014 10-K report, Murphy USA cites RIN sales as having a significant impact on its operating income, offsetting negative margins in its product supply and wholesale business segments. "...In the year ended December 31, 2014...sales of RINs reached \$92.9 million compared to \$91.4 million in the prior year." Indeed, 85 percent of Murphy's profit in 2014 came from RINs. In its 2015 10-K filing, Murphy states "...Incremental revenue is generated by capturing and selling RINs via our capability to source bulk fuel and subsequently blend ethanol and bio-diesel at the terminal level." And in a 2015 interview, Murphy USA CEO Andrew Clyde stated "We expect the contribution from product supply and wholesale to be below our annual guidance....but more than made up for by higher than expected RIN sale volume and prices."

An examination of Marathon Petroleum reveals a similar strategy. Marathon owns Speedway convenience stores and retail fuel stations and is the nation's largest company-owned and operated convenience store chain based on revenue. For 2014, Marathon reported that "Other income increased \$59 million compared to 2013 and that the increase was due primarily to higher gains on sales of excess RINs of \$74 million."

The bias against small retailers has serious implications for their long-term survival because the current regulatory regime governing RINs trading allows large fuel marketers and large retailers to gain revenues and a competitive advantage over small retailers. Reports indicate that large retailers are using the RIN profit stream for retail expansion and acquiring a larger share of a limited market. Small retailers are losing both sales volume and stores to large retailers. In other words, small retailers aren't just less profitable but they are going out of business due to their growing inability to compete with large retailers. As a result, the demise of small "mom-and-pop" fueling stations has accelerated, with more than 12,000 closing since 2007. [API Retail Outlet 2014 Summary and [www.cspdailynews.com/industry-news-analysis/corporate-news/articles/us-c-store-count-down](http://www.cspdailynews.com/industry-news-analysis/corporate-news/articles/us-c-store-count-down).]

Some industry analysts predict the bias against independent refiners and small retailers is likely to worsen next year. Andy Lipow, president of Lipow Oil Associates, believes the price of RIN credits could escalate rapidly in 2017 if the demand for gasoline continues growing at its current pace and the RVO blending requirement jumps to nearly 19 billion gallons of renewable fuel. With the prospect of higher profits associated with RINs trading, Goldman Sachs recently upgraded the stocks of some large retailers.

### **WHY COMPETITION MATTERS IN THE RETAIL FUEL MARKET**

The trading of RINs purely for financial gain is a perversion of the original intent of the RFS program that was supposed to promote pass-through of the RIN value to retailers and consumers while encouraging higher renewable fuel blends. In practice, the RFS has promoted

only modest increases in blend ratios while inducing a major shift in the retail market, with large retailers gaining market share at the expense of medium-sized and small businesses.

American households and businesses have long benefited from the lowest gasoline and diesel prices in the world, outside of some OPEC countries. Relatively cheap and abundant motor fuel is not only a boon to American families, affording more disposable income for other necessities, but it has also helped maintain our global industrial advantages by holding down transportation costs. Historically, strong competition in the retail fuel market has been an important factor holding down prices for consumers and businesses. But that competitive market is now at risk.

Between 1994 and 2015, the number of fueling stations in the U.S. dropped from 202,800 to about 150,000. Population shifts, gentrification and land constraints have all played a role in this decline; but the rate of decline has increased since the implementation of the RFS program a decade ago.

Industry-wide statistics highlight the vulnerability of small fuel retailers. For large retailers, average net profit margins increased to nearly 3 percent in 2014 compared with 1.6 percent in 2012. At the same time, net profit margins among small private gas stations were relatively flat. Furthermore, an analysis conducted in 2013 by Study Groups/Finance & Resource Management Consultants found that “high volume retailers suck a lot of volume out of the market, making the economics more challenging for traditional convenience store operators and the dealers they serve.”

The same study cited a case in Northern New Jersey where two independent retailers dropped their prices by more than 10 cents a gallon when they saw cars lining up 10- and 15-deep at a nearby Costco location. One of the operators reasoned he would be out of business if he didn't lower his price to compete with Costco. At the same time, of course, his profit margin dropped dramatically. On a global scale, if profit margins for small, independent retailers continue to narrow in order to "meet the competition," even more of these businesses can be expected to fail in coming years. Fewer small retailers, in turn, will mean higher fuel prices for consumers along with a reduction in the services these businesses provide, such as auto repair and maintenance.

#### **HOW TO BALANCE THE PLAYING FIELD BY CHANGING THE POINT OF OBLIGATION**

In theory, with higher RIN prices anticipated as mandated RVOs grow year after year, large retailers should increase the blending infrastructure for renewable fuels and promote higher blends by passing on the RIN value to consumers. But because large retailers aren't obligated parties, they have no incentive to do this. Put differently, the higher RIN values won't motivate them to blend higher levels of renewable fuels because the RINs can be sold to generate supplemental revenue. However, while incremental supplemental revenue available at a given location presents a windfall that effectively subsidizes large retailers, the absence of additional infrastructure for blending and distributing higher-order renewable fuel blends is an indicator that the revenues from renewable fuel blending are either not significant enough or



not predictable enough to motivate large retailers to invest the millions of dollars that would be required at any given blending or distribution location to pay for capital improvements.

On the other hand, if the RFS obligation were placed at the blending point, and large retailers became obligated parties, these retailers would be more likely to promote the goals of the RFS and increase their marketing and distribution of higher renewable fuel blends. Importantly, such a change would eliminate some of the competitive disadvantage that small retailers currently face due to the RIN revenue generation capabilities of large retailers. Without this change, the current RFS system will continue to harm competition in the transportation fuel market and drive additional small retailers out of business.