

USING E85 TO CONQUER THE E10 BLEND WALL AND COMPLY WITH THE RFS IN 2013

Some oil companies are claiming that the Renewable Fuel Standard's (RFS) renewable fuel blending requirements in 2013 cannot be met with physical ("wet") gallons of ethanol because of the so-called E10 "blend wall." They say the only means they have of complying with the 2013 RFS will be to turn in RIN credits for the required volumes that cannot be consumed in E10 blends.

A quick review of the facts demonstrates the absurdity of these claims. The 2013 RFS requirements could be easily met with a combination of E10, E15 and E85 blends. This brief analysis examines a readily available pathway to RFS compliance that utilizes only E10 and E85 blends.¹

According to EIA data, U.S. drivers are expected to consume 133.7 billion gallons of gasoline in 2013. This means the amount of ethanol that can be consumed as E10 is limited to **13.37** billion gallons (bg). The RFS requirement for "renewable fuel" (typically grain-based ethanol) in 2013 is 13.8 bg. Thus, the 2013 RFS requires 430 million gallons (mg) of ethanol to be consumed in blends above the E10 level. This volume of ethanol can easily be consumed by the existing automotive fleet through the existing fuel distribution system. In other words, not a single penny needs to be invested in new infrastructure or vehicles to facilitate 2013 compliance with RFS renewable fuel blending requirements.

E85 has been used for decades in flex fuel vehicles (FFVs) and there is a pre-existing base of demand for the alternative fuel. Typical consumption of E85 over the past several years has been around 200 mg, meaning roughly 150 mg of ethanol are consumed annually in E85 blends. Thus, when baseline (or "status quo") consumption of E85 is considered, the amount of new, incremental ethanol that needs to be consumed in 2013 to comply with the RFS falls to just 280 million gallons. This amount of ethanol could be distributed as 364 mg of E85. When added to baseline E85 demand, total E85 sales in 2013 would need to be 564 mg (430 mg/77% ethanol content).

This amount of E85 can be readily consumed in 2013, as there is adequate E85 refueling infrastructure and more than enough FFVs on American roadways. E85 is available at 3,068 retail outlets today in states across the country.² This means the average retail station offering E85 would need to sell 184,000 gallons of E85 in order for 564 million gallons of ethanol to be consumed nationwide. This amount would represent roughly 15-18% of the average station's gasoline sales. State government data show that E85 stations in metro locations have

¹ For the purposes of this analysis, we assume E85 is 77% ethanol content on average.

² E85prices.com

averaged annual sales of 120,000 gallons in the past.³ Further, data show some stations offering E85 have recently sold as much as 49,549 gallons of E85 in one month for an annualized rate of 594,588 gallons of E85—this is more than three times the amount of E85 that the average station would need to sell in 2013.⁴

Data also show that E85 sales can increase dramatically when E85 is priced well below regular gasoline to offset the lower energy density. In recent months, higher RIN prices have enabled unprecedented E85 discounts, with E85 commonly selling for \$0.60-1.00 per gallon less than E10. Positive E85 economics have resulted in the addition of more than 60 new E85 refueling locations across the country so far this year. **Clearly, there are enough E85 refueling stations to distribute the volumes needed to meet the RFS this year, especially when current E85 economics are considered.**

As far as vehicles are concerned, there are between 15-17 million FFVs on the road today. Based on average annual fuel consumption, the existing FFV fleet could consume 9-10 billion gallons of E85 annually (accounting for roughly 7-8 billion gallons of ethanol).

³ Minnesota Dept. of Commerce

⁴ Id.