

What Will Likely Drive LCFS Credit Values

California Fueling (CF) is the technology arm behind VESTA™, the only currently approved CARB NOx Mitigant. Each month, we will be issuing updates to select clients and prospects covering the LCFS and CA biodiesel market conditions. This is a first edition and we'd be happy to receive any and all feedback you may have about the observations shared below.; you can email us at info@californiafueling.com.

We're a little more than 100 days from the implementation of CARB's Alternate Diesel Fuel Regulation (ADF), which requires a NOx Mitigant for BXX blends above seasonal allowances. There's a cost to using VESTA™ and the obvious question now is – will the end user adjust to this new cost. The opinions are varied at the moment, but there have been factors that support this new use; the primary being the trajectory of the LCFS credit value.

For the first time in LCFS history, Q1 2017 deficits outweighed credits and the LCFS credit value increased significantly in value. Why did the LCFS value increase? Was it because in Q1 biodiesel volumes were down? Was it because CI indexes of certain renewable fuels increased? Both of these questions are reasonable answers. The real driver is CARBOB – yes oxygenated gasoline.

As reported in CF's online LCFS presentation¹, approximately 210 million gallons of gasoline equivalent (2.39 million metric tonnes of carbon dioxide equivalent) need to be replaced by renewable fuels in 2017. Where will that reduction come from – likely not in CARBOB because ethanol CI values appear to have levelled off and ethanol in gasoline has reached full maturity already. Biodiesel doesn't face the same limitations as ethanol and has supply capabilities of up to 800 million gallons based on full saturation at B20.

CARB regularly reports LCFS credits and deficits². In Q1 2017, there were considerably more CARBOB deficits than credits (1.9 million, up 500% vs '15 and up 25% vs Q4 '16). Second to CARBOB in the deficit column is diesel at 360,000. CARBOB and diesel will continue to drive the deficits and in our view these growing deficits will outweigh credits resulting in a decreasing bank balance trend. This in turn should have an increasing impact on LCFS values as we head into Q4. The next big date will be when CARB reports Q2 '17 deficit numbers. Q2 '17 credits are estimated to be in the range of 1.7 million. Will LCFS credit values support the ongoing use of a NOx Mitigant, highly probable.

VESTA™ is a specialty chemical which requires proper supply chain planning. Proper forecasting is required to meet individual customer requirements. With the VESTA™ launch right around the corner, it's important that you reflect on your business and determine what your market needs might be for VESTA™. Once you have determined your projected needs and would like to discuss the markets we would be pleased to speak with you to plan accordingly. Contact Paul Nazzaro (paul@pacificfuelresources.com) at PFR to discuss VESTA™ supply and planning.

¹<http://www.californiafueling.com/solutions>

²<https://www.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm>