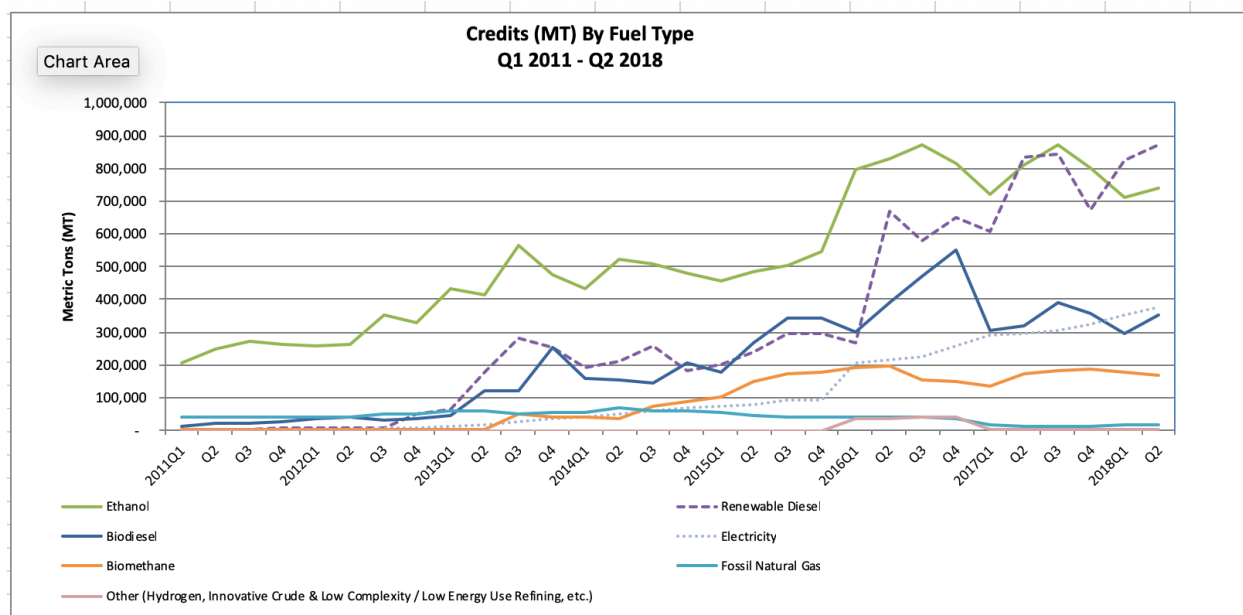


## Renewable Diesel has surpassed ethanol as the leading YTD LCFS credit generator

According to CARB's 2018 Q2 LRT Report<sup>1</sup>, renewable diesel generated ~871k quarterly credits. In the same period, ethanol generated ~741k credits. From 2011-2018, ethanol has been the leading credit generator. However, YTD renewable diesel is generating more credits than ethanol, an astonishing feat. An LCFS credit generator overview by feedstock is provided below.



Biodiesel has slipped to fourth position as a credit generator, recently surpassed by electricity. Biodiesel credit generations seems to have plateaued over the last year averaging approximately 340k credits per quarter. Since Q3 '17, the LCFS credit bank is running at a deficit of more than 1 million credits and biodiesel could fill that void.

Why isn't more biodiesel being used? As an industry, we have obstacles. One such obstacle is infrastructure; biodiesel lacks infrastructure and NOX Mitigated biodiesel can be difficult to get. Infrastructure is an area that needs industry focus and attention.

If we had a blank canvas, would we want terminal BXX blending? To the best of our knowledge it's available at very few California terminals. Could we live with biodiesel and diesel available at the same terminals individually? Not very many terminals have this capability. If as an industry, we can't figure out how to crack this nut biodiesel will be relegated to a steady credit generator instead of one of the spotlights. With all the brain power we have in this business and all of the challenges we've faced in the past, we should be able to put our minds together and make biodiesel a prime-time credit generating player!

Renewable diesel has capacity limitations even in the face of ongoing expansions. CARB estimates biodiesel volumes will increase 300% over the next 5 years. In order to achieve these volume forecasts, we must figure out a way to solve the infrastructure barrier. We haven't; what a shame. On the other hand, could a group of industry participants band together and work on solving the infrastructure problems – not in one fell swoop, but in little pieces at a time. As Alexa says, "Rome wasn't built in a day"!

<sup>1</sup>[https://www.arb.ca.gov/fuels/lcfs/dashboard/quarterlysummary/20181031\\_q2datasummary.pdf](https://www.arb.ca.gov/fuels/lcfs/dashboard/quarterlysummary/20181031_q2datasummary.pdf)