



State of Oregon Department of Environmental Quality

Clean Fuels Program Fourth Quarter 2021 Data

Contact: OregonCleanFuels@deq.oregon.gov
700 NE Multnomah St., Portland, OR 97232

DEQ staff are pleased to issue this quarterly data summary for the Clean Fuels Program. The aggregated quarterly data for the program is also posted on our [website](#) in an Excel spreadsheet.

Figure 1 shows the number of credits and deficits generated from Q1 2016 through Q4 2021. Credits are generated by fuels that have a carbon intensity which falls below this year's target, while deficits are generated by fuels whose carbon intensity is higher than this year's target. The green line indicates banked credits which is the difference between all credits and deficits generated.

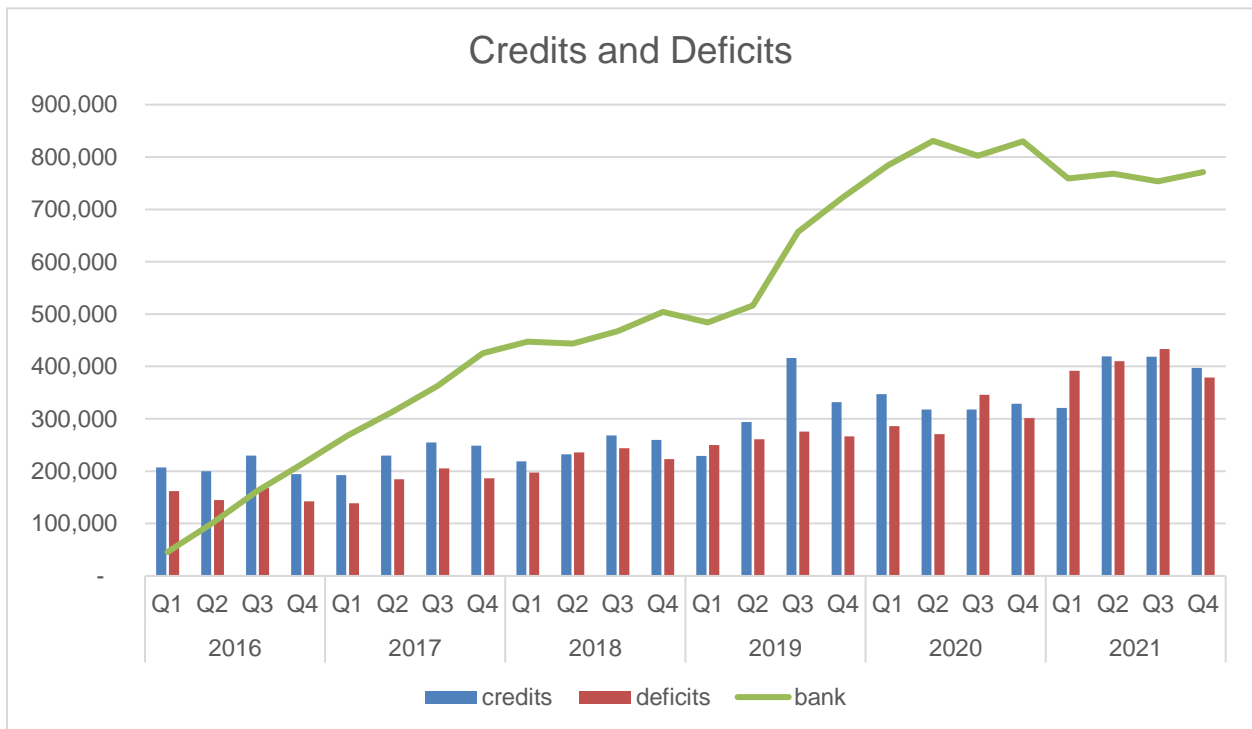


Figure 1. Credits and deficits, Q1 2016 – Q4 2021

Credits generated by fuel type

Figure 2 shows the breakdown of credit generation by fuel type from Q1 2016 through Q4 2021. The majority of credits have come from ethanol (which is blended into gasoline) and biodiesel (which is blended into diesel). Credits from electricity are increasing steadily. The Others category includes fossil and renewable natural gas, propane, and hydrogen.

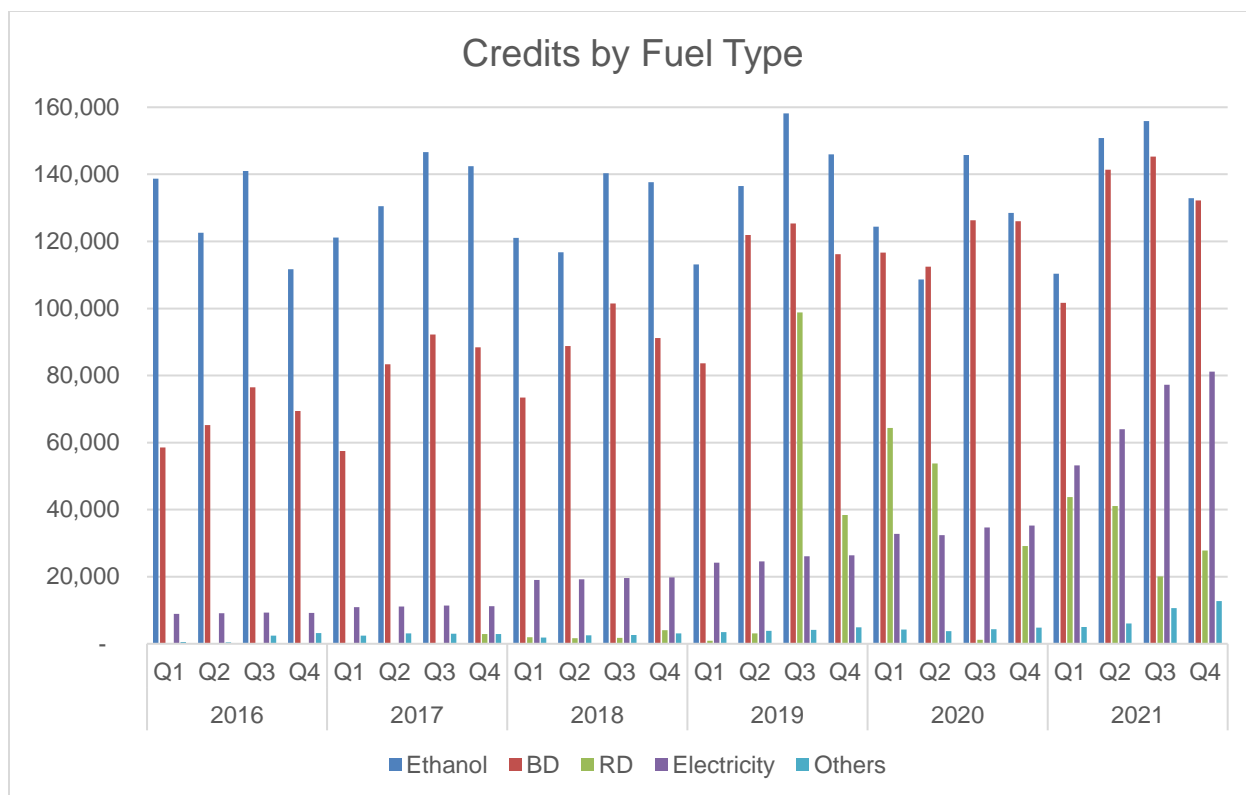


Figure 2. Credits generated by fuel type, Q1 2016 – Q4 2021

Special topic: Renewable diesel CI in quarter 4

As you review the Excel spreadsheet that contains the data used for these charts, you will see a negative volume for renewable diesel in this quarter. A large volume of renewable diesel was imported in Quarter 3, held in state, and then exported in Quarter 4, causing the data to reflect a negative volume. There was renewable diesel distributed within the state in Quarter 2, but on net, there was a greater volume exported in that quarter. Due to the way the OFRS calculates the average CI, this results in a negative renewable diesel CI for Q4.

Gasoline and diesel demand

Figure 3 shows gasoline and diesel demand from Q1 2016 through Q4 2021. In Q4 2021, gasoline demand (the sum of gasoline, ethanol, and E10 blends) and diesel demand (the sum of diesel, biodiesel, renewable diesel, and blends thereof) both declined slightly from the previous quarter. Data from the [US Energy Information Administration](#) confirms these trends for this time period.

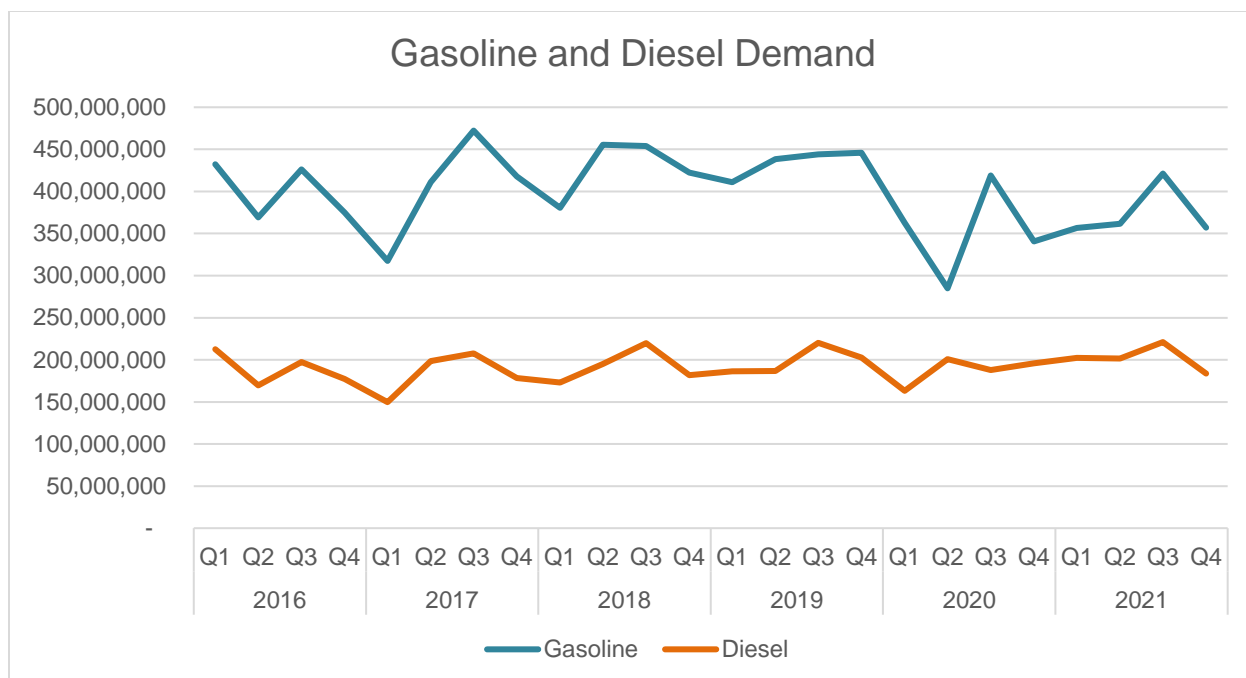


Figure 3. Gasoline and diesel demand, Q1 2016 – Q4 2021

Electricity credits by categories of electric vehicle charging

Electricity credits are generated from using electricity as a transportation fuel in a variety of electric vehicles. As we have added additional categories of electric vehicles to the program, DEQ is now providing a breakdown of these credits to show the relative contribution from the various categories as described below:

- **Electricity On-road (non-residential charging)** - This includes credits generated from entities reporting non-residential charging such as chargers for public, workplace, fleet, and multi-unit dwelling charging of light- and heavy-duty electric vehicles. This activity began generating credits in 2016.
- **Electricity Off-road (fixed guideway)** - This includes credits generated from charging public transit vehicles and equipment such as fixed rail and the aerial tramway systems. These vehicles began generating credits in 2018.
- **Electricity Off-road (eForklifts)** – This includes credits generated by electric forklifts. These vehicles began generating credits in 2019.
- **Electricity Off-road (Other)** - This includes credits generated by other off-road electric vehicle categories including electric cargo handling equipment (eCHE), electric transport refrigeration units (eTRU), and electric ocean-going vessels (eOGV). eTRUs began generating credits in 2019, and eCHE and eOGV began generating credits in 2021.
- **Electricity (residential)** - This includes credits generated by charging light-duty electric vehicles at residences. DEQ calculates these credits on a semi-annual basis and are added in the Q2 and Q4 Data Summaries.

Incremental credits

In 2021, CFP added new provisions to incent the use of renewable electricity as a transportation fuel. Simply put, electricity credit generators can retire renewable energy credits to claim a carbon intensity other than the grid mix, including zero-carbon electricity, and generate incremental credits for the

electricity they are reporting. This is available to both residential and non-residential charging of electric vehicles.

Non-residential incremental electricity credits are generated by the Oregon Fuels Reporting System as registered parties file their quarterly reports and are automatically included in the credit generation by category in Figure 4. As of Q4 2021, approximately 81% of non-residential charging reported to the CFP has been paired with renewable electricity through the retirement of renewable energy credits or the use of a utility green power program.

Residential incremental electricity credits are generated when utilities report charging for their customers who own electric vehicles and who also participate in a utility's voluntary green power program. Incremental credits can also be generated when the utilities retire renewable energy credits on behalf of the residential charging of their customers. Residential incremental electricity credits are calculated when the utility retires the renewable electricity credits or provides the match of EV owners and green power program subscribers and is retroactively applied to the prior quarters annually or bi-annually. The Q4 2021 report is the first time those residential incremental credits are included. Figure 4 shows the number of credits generated from electricity used for charging various electric vehicles by category.

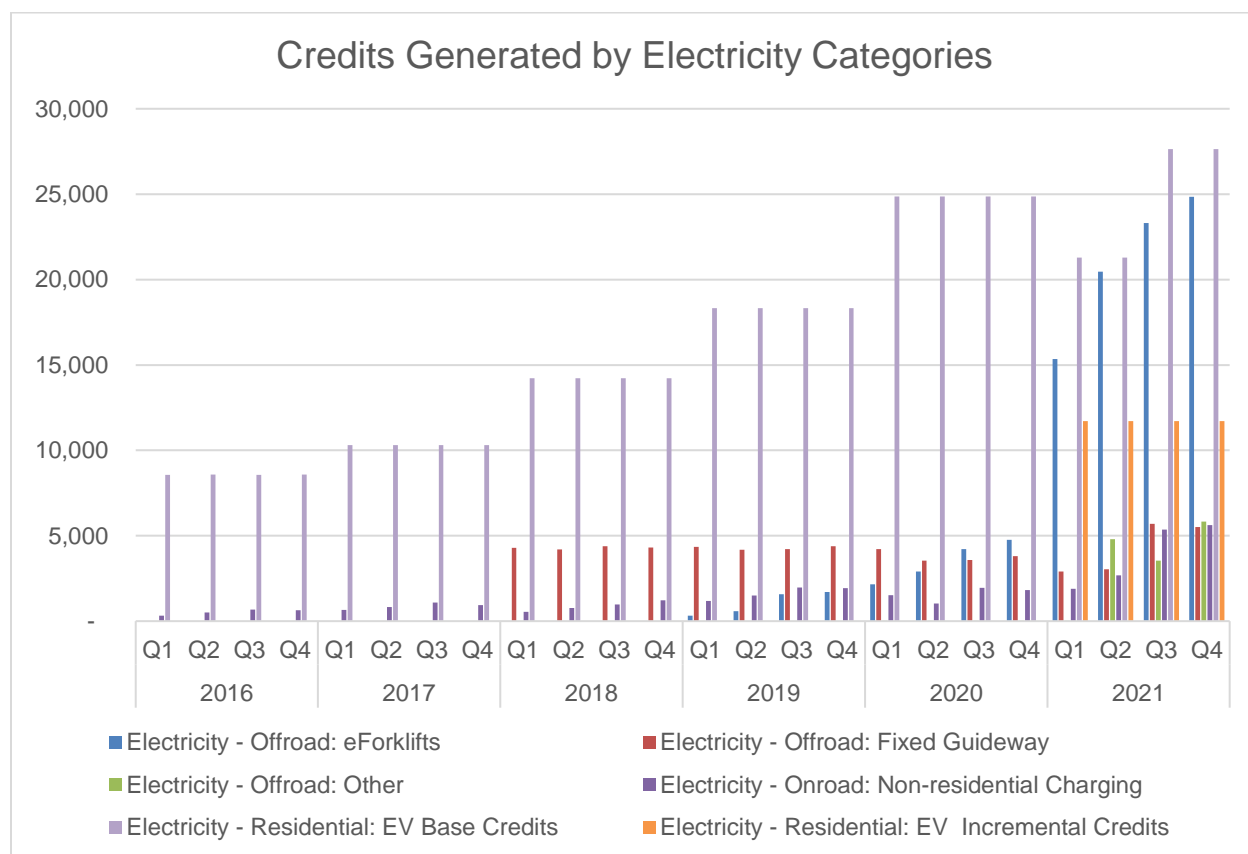


Figure 4. Credits generated from electricity by category, Q1 2016 – Q4 2021

Alternative formats

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.