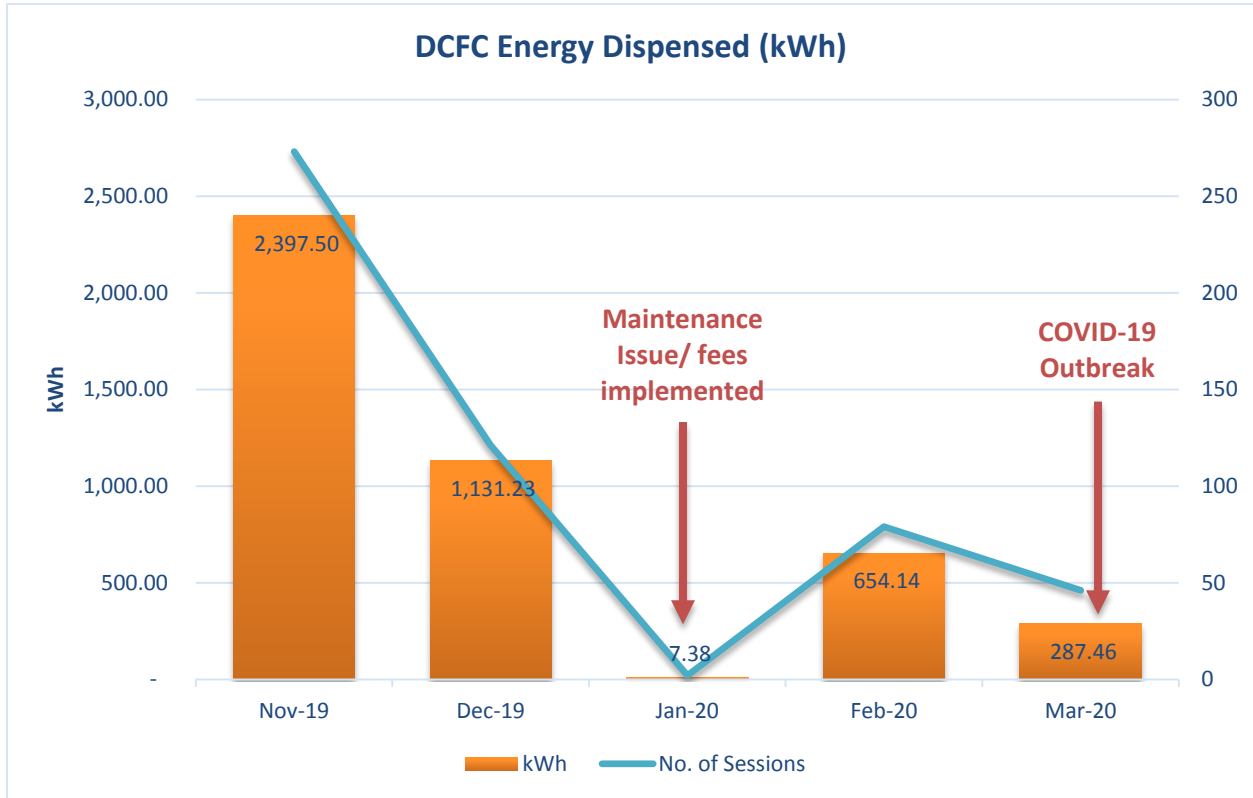


## DC FAST CHARGER

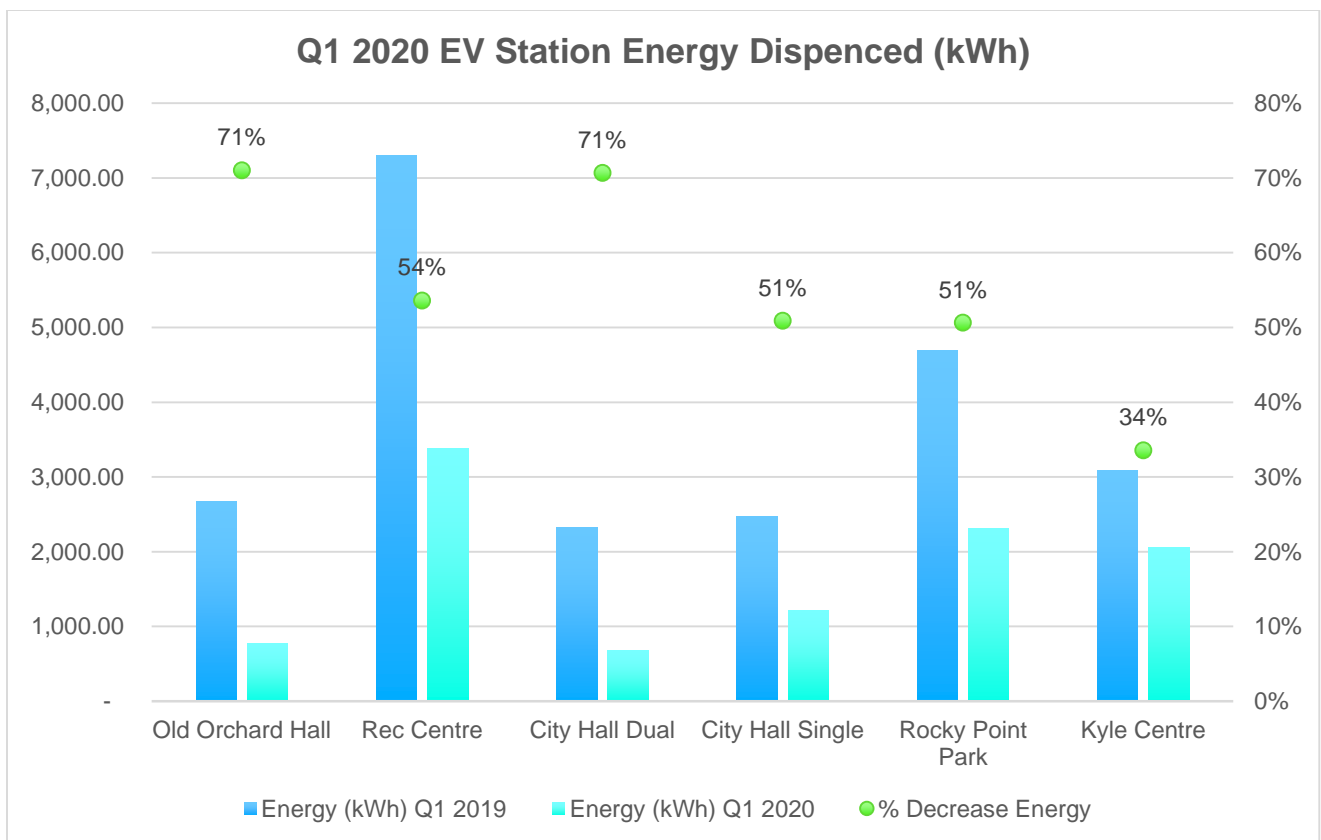
	Results
Energy Issued (kWh)	4,477.70
Number of Charging Sessions	521



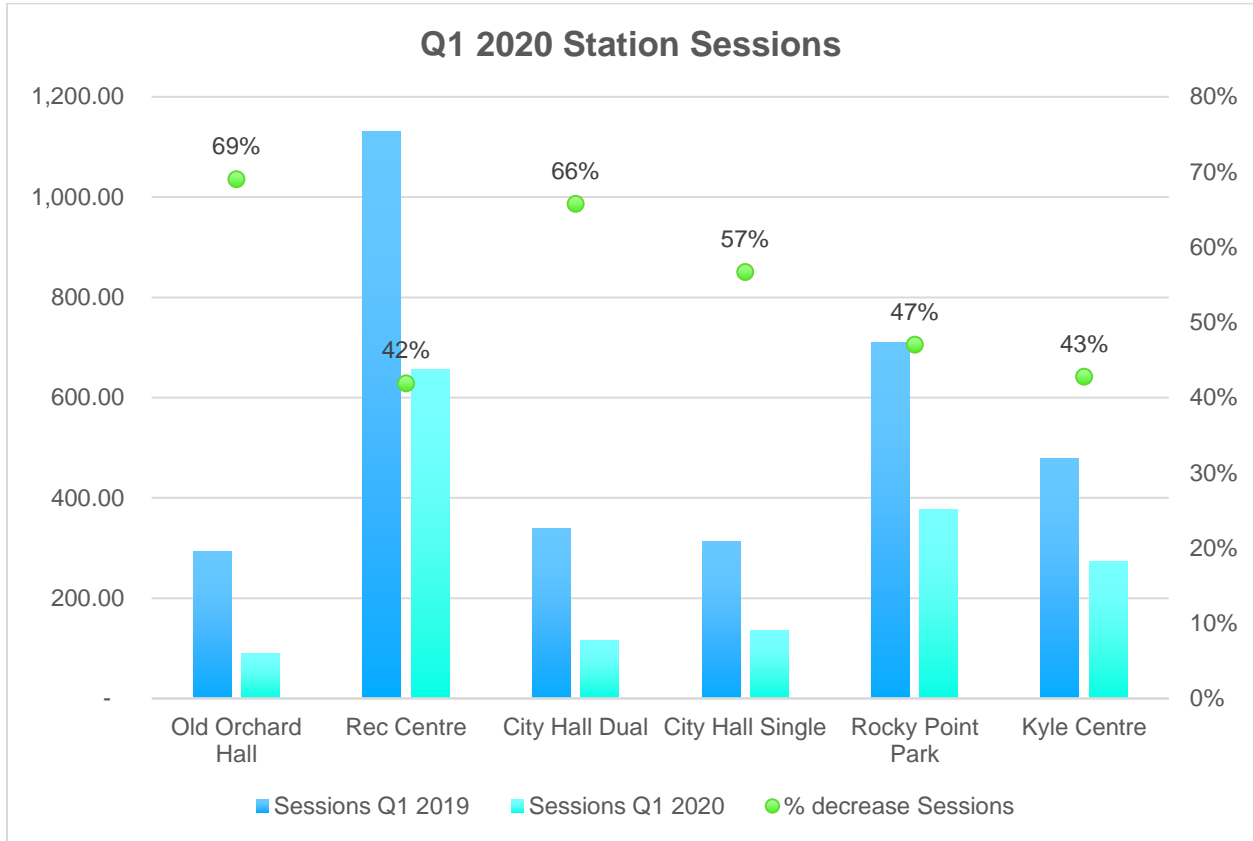
## LEVEL 2 STATIONS

The energy issued at each of the City's Level 2 stations has decreased in the first quarter of 2020 as compared to Q1 in 2019, likely due to the implementation of fees as well as a few maintenance issues that caused several stations to be powered down intermittently and the COVID-19 outbreak where most people are staying home.

Energy dispensed at the City Hall Dual port station and Old Orchard Hall decreased the most (71%). In addition to user fees implemented, at City Hall this drop in energy could be potentially due to the station being a power sharing station and the fact that it is underground and users may view this as a barrier to usage. At Old Orchard Hall, the energy decline may depend on usage of the facility building and weather, as it is located near Old Orchard Park. The change in energy issued at the Kyle Centre station was the least (34%), despite it being a power sharing station.

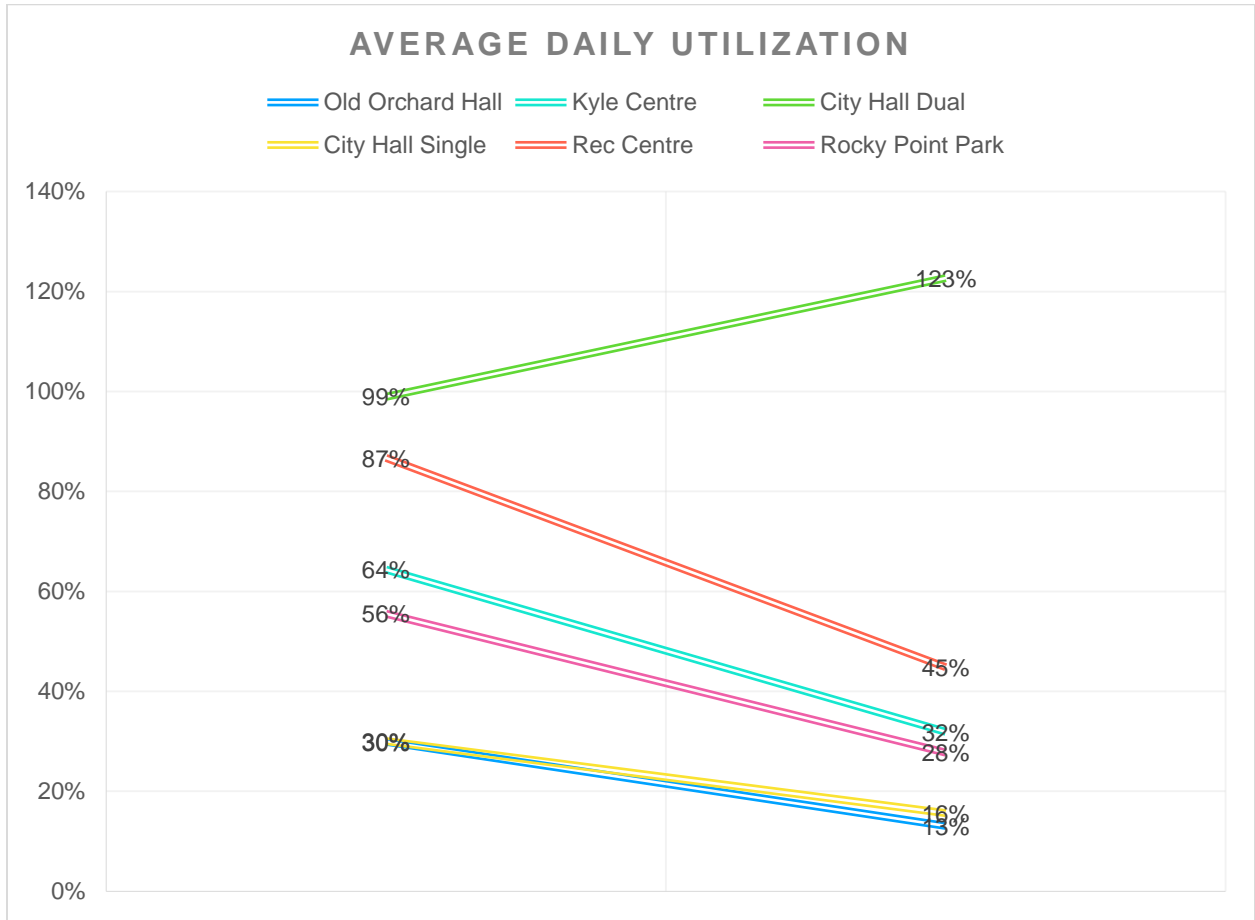


Similarly, the number of charging sessions at each of the Level 2 stations decreased following the introduction of user fees. Old Orchard Hall saw the steepest decline (69%) of sessions, while the Recreation Centre station saw the least (42%). Since the Old Orchard Hall station is located in a predominantly single-family home residential area, the introduction of the fee may have decreased the energy dispensed and sessions as users would find it more equitable to charge at home.



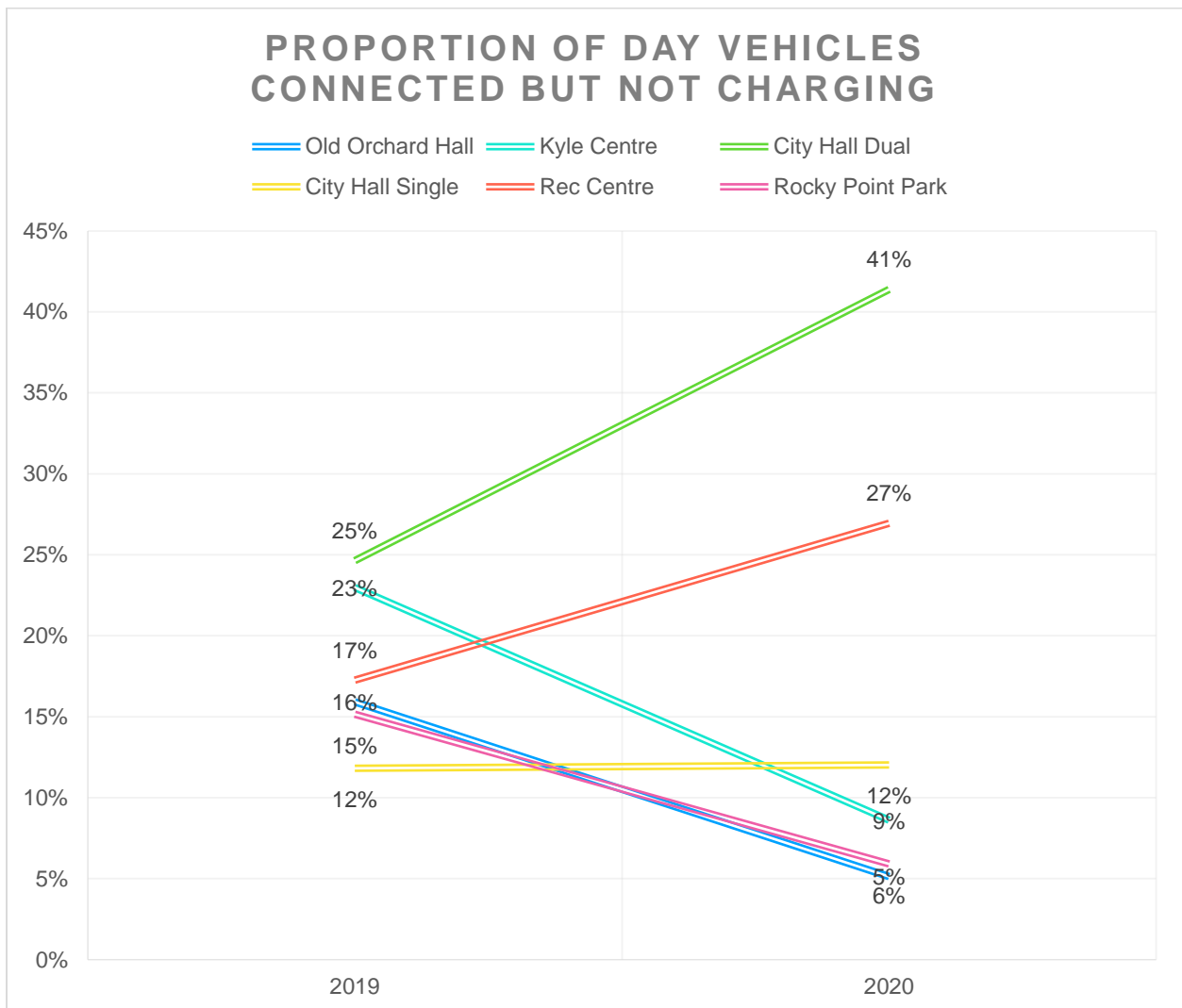
# AVERAGE DAILY UTILIZATION

One of the primary goals of the user fees is to increase the availability of the stations so that more users have access. The usage from the first quarter of fee implementation in 2020 compared to Q1 2019 indicates that this was achieved at all stations except for the City Hall Dual charger. This is due to the fact that the City's Bylaw electric vehicle uses this station as its primary charging spot and remains in the spot if not used and always plugged in.



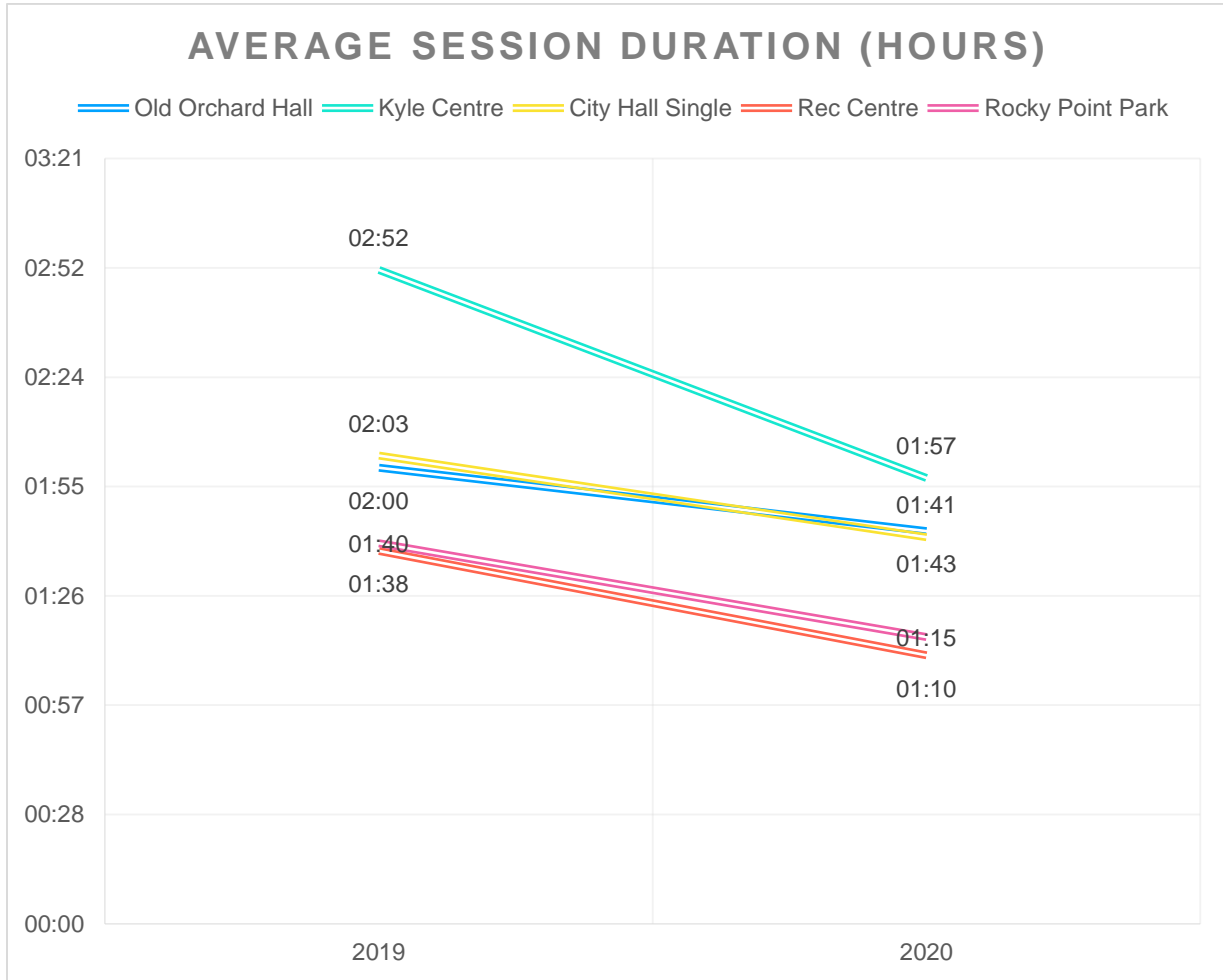
## AVERAGE PROPORTION OF VEHICLES PLUGGED IN BUT NOT CHARGING

Another goal of the user fees is to decrease the amount of time vehicles are plugged in to the stations but not actively charging. The usage from the first quarter of 2020 compared to Q1 of 2019 indicates that this was achieved at all of the stations except the Recreation Centre station and City Hall Dual station. City Hall Dual station proportion is due to use the City's Bylaw electric vehicle that always plugs in to maintain a full charge. The increase at the Recreation Centre is suspected to be caused by a station malfunction issue that caused users to be charged a fee when the station was not administering any energy. The data makes it difficult to determine which sessions are due to this issue and which vehicles are not pulling energy because their battery does not require a charge.



# AVERAGE SESSION DURATION

Shorter charging sessions were also expected to be observed with more efficient station use as a result of user fees. This change was observed at all of the stations except the City Hall Dual station. The City Hall Dual station was not included in this graph due to the scale of the session duration, being significantly higher due to the City’s Bylaw EV usage.



Overall, the observed behaviour over Q1 2020 indicates that the fees are influencing more efficient and fair use of the stations. However, due to the number and type of maintenance issues and the impact of the COVID-19 outbreak, the results of this analysis cannot be trusted to accurately reflect behaviour over the period of time observed.