

Executive Summary

A fourth-year participant in the Chamber Carbon Action Plan, Northern Lights Estate Winery (NLEW) has once again resolved to improve its environmental practices by accounting for its yearly carbon emissions and identifying ways to reduce its total carbon output. NLEW has again elected to measure the organizational boundary and exceed standard industrial practices by measuring the Scope 3 emissions of its employee commute and business travel of NLEW representatives. Despite its continued growth in business throughout 2019, Northern Lights Estate Winery has reduced its total carbon emissions by 1.6 tonnes of carbon dioxide equivalent from 2018 to 2019 (mainly in the employee commuting section) bringing **the 2019 emissions total to 18.6 tCO₂e**.

	Emission Source	tCO ₂ e
Scope 1	Natural Gas	10.4
	Mobile Fuel Gasoline	2.4
	Mobile Fuel Diesel	0.3
	Propane	2.3
Scope 2	Electricity	1.3
Scope 3	Business Travel	1.7
	Staff Commute	2.6
Organization Total (tCO₂e)		18.6

To claim carbon neutrality in 2019, Northern Lights Estate Winery would need to purchase offsets.

Regular offsets – \$20/tonne = \$380
Gold Standard offsets - \$30/tonne = \$570

**To learn more about offsetting, see the “Achieving Carbon Neutrality” section of the report.*

To continue its path of carbon reduction, Northern Lights Estate Winery should consider prioritizing the implementation of the following “business as usual” changes:

- Retrofit or replace the delivery van to a more fuel-efficient model.
- Stringent accounting for gas and diesel use. Often times, rough estimates on usage of fuel are higher than what is actually used. This can result in a higher amount of carbon emissions reported than what was actually created.
- Replacing the temporary ATCO trailers with permanent, well insulated structures.
- Allow employees to work from home when possible. This will reduce the commuting emissions.
- Invest in renewable energy technology on-site. NLEW’s electricity consumption has increased every year over the last three years. By implementing renewable energy generation (like wind or solar), NLEW would reduce a portion of its Scope 2 emissions.
- Take advantage of government or industry incentives, such as Fortis BC’s ongoing (as of August 2020) *Commercial Performance Program for Existing Buildings*.
<https://www.fortisbc.com/rebates/business/commercial-performance-program-for-existing-buildings>