

Summary of carboNZero certification

solarZero Limited (previously known as Solar City) Year 3 of 3 year certificate period

solarZero Limited meets the requirements of carboNZero^{Cert™} certification having measured its greenhouse gas emissions in accordance with the requirements of ISO 14064-1:2006, committed to managing and reducing its emissions and neutralised its remaining unavoidable emissions through the cancellation of an appropriate number of verified carbon credits in respect of the operational activities of its organisation.

SOLARCITY

Introduction¹ – solarZero (previously known as Solar City) has been around since the early days of the solar industry. We’ve put solar on more homes and businesses than any other company in New Zealand and have won multiple awards for innovation and excellence. This isn’t just our business, it’s our mission. Our commitment to making solar accessible is deep-rooted and long-term and our solidly established business is growing steadily.

We are committed to 100% renewable energy for New Zealand. We’re in business with the purpose of tackling climate change by making it easy and affordable for Kiwis to shift to clean energy. Our stance on the environment is unerring. Doing what’s best for the planet and future generations is central to every decision we make. We are one of the fastest growing green companies in New Zealand.

At solarZero we strive for the highest social and environmental goals and in doing so aim to influence all those we meet and work with throughout our business activities. Sustainability is core to our organisation and we apply a continuous improvement approach to business practices, always searching for new ways to protect the environment; including but not limited to paperless communications with customers, working with ethically and environmentally preferred suppliers and selecting a fleet of cars for low emission and energy efficiency.

Boundary – The boundary for the preparation of the organisation’s greenhouse gas (GHG) inventory is for one site. All business activities have been included.

Consolidation approach – The operational control consolidation approach has been used to account for operational emissions with reference to the methodology described in the GHG Protocol and ISO 14064-1:2006 standards.

Base year – 1/10/2015 to 30/09/2016

Measurement period – 1/10/2017 to 30/09/2018

¹ **Disclaimer:** This Disclosure Statement is a summary of the verified information considered for certification and the certification decision. It should not be taken to represent the full submission for certification. Whilst every effort has been made to ensure that the information in this Disclosure Statement is accurate and complete, Enviro-Mark Solutions Limited does not, to the maximum extent permitted by law, give any warranty or guarantee relating to the accuracy or reliability of the information.

Summary of carbonZero certification

solarZero Limited (previously known as Solar City) Year 3 of 3 year certificate period

Emissions source inclusions – The operational GHG emissions for the organisation by emissions source are shown in Figure 1 below.

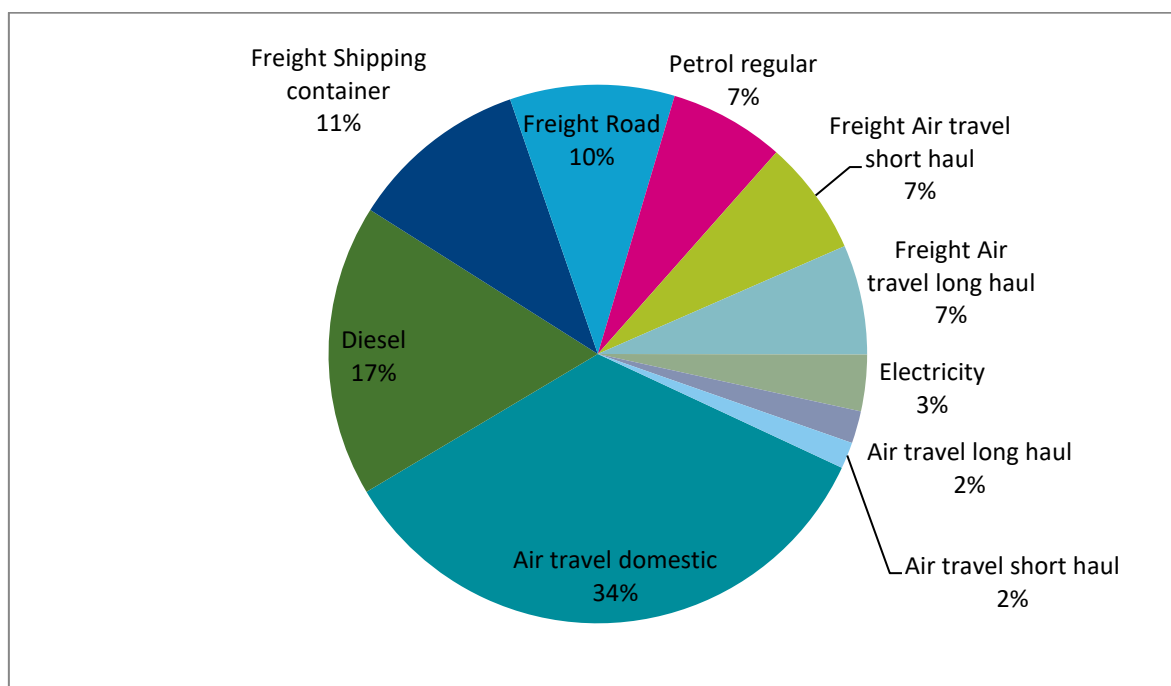


Figure 1: GHG emissions by emissions source (tCO₂e).

Emissions as tonnes of carbon dioxide equivalents (tCO₂e) for this period were:

Emissions summary by scopes		Units
Scope 1 total	49.74	tCO₂e
Scope 2 total (location-based method)	11.59	tCO₂e
Scope 3 total	150.99	tCO₂e
Mandatory scope 3	150.99	tCO ₂ e
Additional scope 3	0.00	tCO ₂ e
One-time scope 3	0.00	tCO ₂ e
Total inventory (location-based method)	212.32	tCO₂e

Emissions summary by scopes		Units
Scope 1 total	49.74	tCO₂e
Scope 2 total (market-based ² method)	7.33	tCO₂e
Scope 3 total	150.99	tCO₂e
Mandatory scope 3	150.99	tCO ₂ e
Additional scope 3	0.00	tCO ₂ e
One-time scope 3	0.00	tCO ₂ e
Total inventory (market-based method)	208.06	tCO₂e

Following GHG Protocol Scope 2 Guidance³, Scope 2 results are now shown using both the location-based method and market-based method; this is known as dual reporting. Under the location-based method to calculate Scope 2 emissions the grid average emission factor is applied, whereas verified supplier-specific and residual mix emission factors are applied for the market-based method. This enables organisations who have taken action to manage their Scope 2 carbon footprint by using a renewable energy provider to quantify the impact against the rest of the market. solarZero Limited purchases its electricity from a renewable energy provider with a verifiable emission factor that is lower than the grid-average, which has reduced its footprint by 4.26 tonnes. If the location-based method had been used for all electricity (i.e., the grid average emissions factor) electricity emissions would equate to 4.75 tCO₂e.

² The market based factor is based on supplier emissions rates and the residual mix; as a residual mix is not yet available for the New Zealand market, in the absence of a supplier rate, the grid average has been used.

³ See GHG Protocol Scope 2 Guidance here: ghgprotocol.org/scope_2_guidance

Summary of carboNZero certification

solarZero Limited (previously known as Solar City) Year 3 of 3 year certificate period

Emissions source exclusions – The following emissions sources were excluded from the inventory for this measurement period:

- Energy and waste of an Auckland apartment that was rented from April to September 2018

Emissions reduction commitments – A GHG emissions management plan and reduction targets have been developed.

- Install solar panels on the new Auckland office and potentially at other offices
- Review shipment quantity and frequency of delivery to reduce freight
- Reduce domestic air travel by careful travel planning

Emissions reduction report against last year's plan – This is the 9th year of reporting under carboNZero programme. Base year has been re-set to 2015/16. An absolute increase in Scope 1 and 2 emissions of 15.79 tCO₂e has occurred against base year. A reduction in emissions intensity (for Scope 1, 2 and mandatory Scope 3 emissions) of 4.6 tCO₂e/\$M has been achieved; based upon a 3 year rolling average.

Offset⁴ – 208 credits Nanyang Danjiang River Solar Cooker Project Phase II have been cancelled on the carboNZero register and will be cancelled (or equivalent) on the relevant external registry within one month of certification. Specific details of cancellation, including serial numbers, will be available on the external registry: www.cleanenergyregulator.gov.au/OSR/ANREU/Data-and-information.

Note: 0.02 tCO₂e were not required to be offset as emissions were from carboNZero certified taxi service supplied by Wellington Combined Taxis Limited and 0.49 tCO₂e were not required to be offset as emissions were from carboNZero certified electricity product supplied by Ecotricity.

Verified by – Enviro-Mark Solutions Limited

Data quality score – Good

Threshold of materiality – Excluded emissions do not exceed 5% of the total footprint within the organisation boundary stated.

Level of assurance – Reasonable

Certification status – carboNZero certified organisation

Certificate number – 2017027J, Year 3 of 3 year certificate period

Valid until – 28 February 2020

solarZero Limited, Level 1, Montgomery House, 190 Trafalgar Street, Nelson. 7010, New Zealand.
Telephone: +64 3 548 3138. Email: andy.booth@solarcity.co.nz, Web: www.solarcity.co.nz

⁴ Under dual reporting, offsets are calculated based on market based factors where available