

# Stormtech Performance Apparel Ltd

Greenhouse Gas Emissions Report for the 2022 Calendar Year

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January 1, 2022 to December 31, 2022

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### BMO Radicle's Climate Smart program at a glance

**900+**

Climate Smart certified businesses to date (trained or in training)

**23,660,000+**

Total emissions measured by Climate Smart to date, in tCO<sub>2</sub>e

Climate Smart Certification is an award-winning training program that helps small and medium businesses in every industry create greenhouse gas (GHG) inventories, then devise emissions reduction plans to take action and make change.

## Key Terms

**Baseline GHG Emissions Inventory:** A comprehensive, quantified list of an organization's greenhouse gas emissions and sources for the initial reporting year (base year). The baseline GHG inventory is the level of greenhouse gas emissions against which future GHG inventories are compared.

**Biologically sequestered carbon:** Long-term carbon stored in biomass, such as forests, soils and peatland. Carbon is "locked" into organic matter through biological processes. This carbon can be released through e.g., burning of biomass as fuel or change in land use.

**Carbon Dioxide Equivalent (tCO<sub>2</sub>e):** The universal unit for comparing the emissions from various greenhouse gases. The carbon dioxide equivalent for a gas is derived by multiplying the mass of the gas by the associated global warming potential (GWP). For example, the GWP for methane is 21. This means that emissions of one metric tonne of methane are equivalent to the emissions of 21 metric tonnes of carbon dioxide.

**Carbon Offset:** A project or activity that results in a given amount of greenhouse gases being avoided or reduced in one place, that is used to 'balance out' another's total GHG emissions. Emission reductions that are real, additional (beyond business as usual), measurable, permanent, and verified can generate offset credits. Credits are tradable certificates.

**Emission Factor:** A factor that converts activity data to GHG emission values, e.g., lbs of carbon dioxide emitted per barrel of fossil fuel consumed.

**Renewable energy certificates (RECs):** RECs are tradable energy certificates representing proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource (e.g., solar or wind) and was fed into the electricity grid.

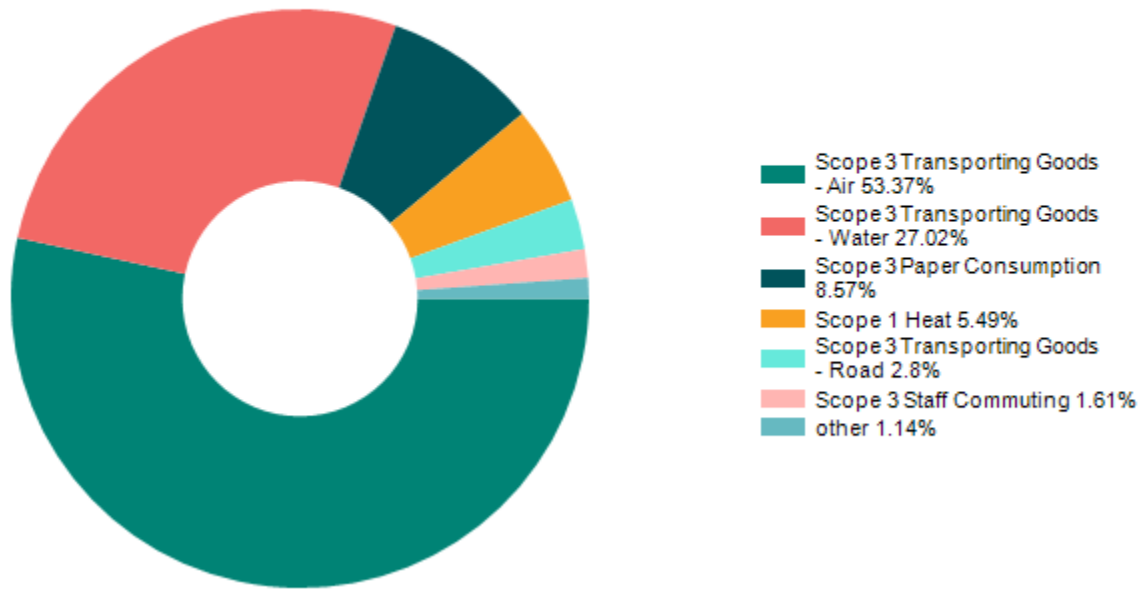


# Stormtech Performance Apparel Ltd 2022 Calendar Year Carbon Footprint

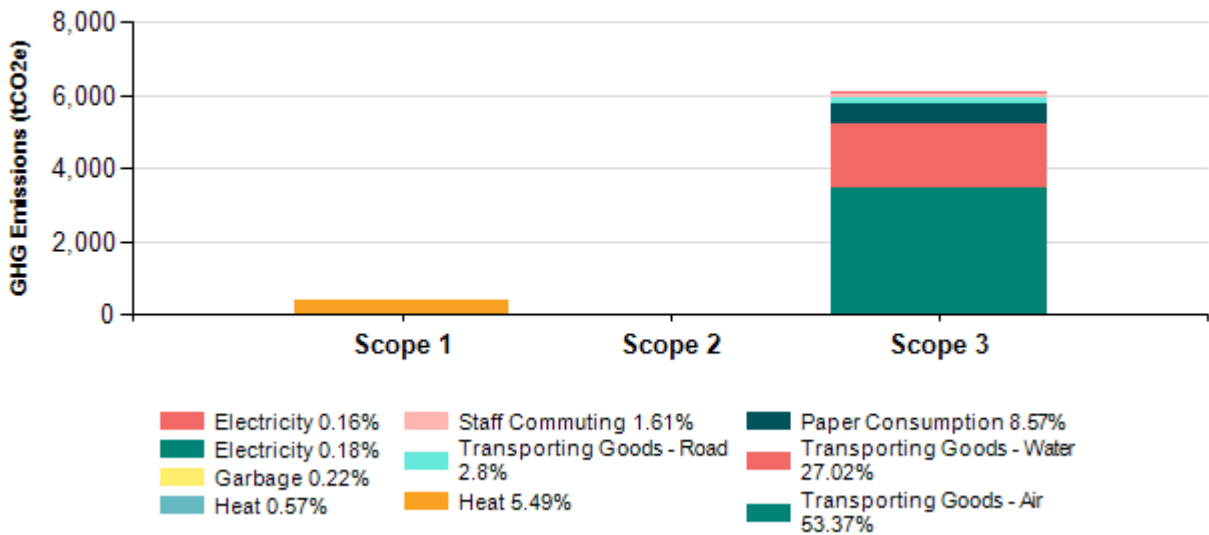
This report details the greenhouse gas emissions footprint for Stormtech Performance Apparel Ltd ("Stormtech") during the 2022 Calendar Year, including the breakdown of emissions by source activity and Stormtech's plan to reduce their emissions going forwards. This report and inventory were compiled in compliance with the [Greenhouse Gas Protocol Corporate Accounting and Reporting Standard](#), Revised Edition.

## Total emissions for the 2022 calendar year

**Total emissions: 6,476.66 tCO2e**



## Total Emissions by Scope



## Analysis

Stormtech Performance Apparel Ltd measured its 1st greenhouse gas inventory with Climate Smart for the 2022 calendar year (Jan 01, 2022 to Dec 30, 2022) and recorded emissions of 6,476.66 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e). Overall Stormtech's largest emissions sources were **transporting goods - air** (53%) **and transporting goods - water** (27%). Stormtech is Climate Smart Certified for 2022.

The following sections present the breakdown of Stormtech's emissions for their 2022 calendar year by scope, as well as details of any emissions of tCO<sub>2</sub> from combustion of biologically sequestered carbon and purchased offsets and renewable energy certificates (RECs).

### Scope 1

Scope 1 emissions totaled 355.38 tCO<sub>2</sub>e in Stormtech's 2022 calendar year.

Activity Type	2022 (tCO <sub>2</sub> e)	% of Emissions	Justifications & Additional Notes
<b>Scope 1</b>			
Heat	355.38	5%	Most emissions are related to the heating of the warehouse (Burnaby).
<b>Grand Total</b>	<b>355.38</b>	<b>5%</b>	

### Scope 2 – Location-Based Emissions

Scope 2 emissions totaled 11.72 tCO<sub>2</sub>e in Stormtech's 2022 calendar year.

Activity Type	2022 (tCO <sub>2</sub> e)	% of Emissions	Justifications & Additional Notes
<b>Scope 2</b>			
Electricity	11.72	0%	No justifications/notes to add.
<b>Grand Total</b>	<b>11.72</b>	<b>0%</b>	

### Scope 2 - Market-Based Emission Factors

The 2015 [GHG Protocol Scope 2 guidance](#) requires companies to report their Scope 2 emissions in two ways: **location-based** (reflecting grid emission factors), and **market-based** (using supplier specific emissions factors and/or those from contractual instruments such as renewable energy certificates - RECs). Note that location-based values are shown on the emissions summary charts presented in this report.

Province/State	Electricity Provider	kWh	Provincial/State Emissions (tCO <sub>2</sub> e)	Utility Supplier Emissions (tCO <sub>2</sub> e)
BC	BC Hydro	595,517.00	7.60	7.60*
ON	Alectra Utilities	158,400.00	4.12	0.04
<b>Grand Total</b>		<b>753,917.00</b>	<b>11.72</b>	<b>7.64</b>

\*Market-based emission factor not available for this supplier.

## Scope 3

Scope 3 emissions totaled 6,109.57 tCO<sub>2</sub>e in Stormtech's 2022 calendar year.

Activity Type	2022 (tCO <sub>2</sub> e)	% of Emissions	Justifications & Additional Notes
<b>Scope 3</b>			
Electricity	10.62	0%	Resulting from the employees' WFH survey.
Garbage	14.51	0%	No justifications/notes to add.
Heat	37.07	1%	Resulting from the employees' WFH survey.
Paper Consumption	555.05	9%	Printed catalogues for consumers contribute to over 90% of emissions for this category.
Staff Commuting	104.16	2%	Resulting from the employees' Commuter survey.
Transporting Goods - Air	3,456.63	53%	Mainly from outbound goods' shipments to customers.
Transporting Goods - Road	181.32	3%	No justifications/notes to add.
Transporting Goods - Water	1,750.21	27%	No justifications/notes to add.
<b>Grand Total</b>	<b>6,109.57</b>	<b>94%</b>	

## Release of Sequestered Carbon

Direct tCO<sub>2</sub> emissions arising from the combustion of biologically sequestered carbon, such as from burning biomass or biofuels, are reported separately from the scopes. For Stormtech's 2022 calendar year inventory, there was no reported release of sequestered carbon.

## Offsets

Stormtech did not purchase offsets in the 2022 calendar year.

### Stormtech's 2022 Emissions Activity by Location

Location Name	Scope	Activity Type	tCO2e	% of Total Inventory
Burnaby	Scope 1	Heat	292.76	4.52%
	Scope 2	Electricity	7.60	0.12%
	Scope 3	Electricity	8.46	0.13%
		Garbage	11.54	0.18%
		Heat	23.59	0.36%
		Paper Consumption	555.05	8.57%
		Staff Commuting	86.50	1.34%
		Transporting Goods - Air	3,456.63	53.37%
		Transporting Goods - Road	181.32	2.80%
		Transporting Goods - Water	1,750.21	27.02%
	<b>Location Total</b>		<b>6,373.64</b>	<b>98.41%</b>
Markham	Scope 1	Heat	62.62	0.97%
	Scope 2	Electricity	4.12	0.06%
	Scope 3	Electricity	2.17	0.03%
		Garbage	2.96	0.05%
		Heat	13.48	0.21%
		Staff Commuting	17.66	0.27%
	<b>Location Total</b>		<b>103.01</b>	<b>1.59%</b>
<b>Grand Total</b>		<b>6,476.66</b>		

## Stormtech's Emission Reduction Plan

See a summary of Stormtech's reduction plan below. For additional information such as a detailed description or estimated implementation and completion dates, please see the Climate Smart software.

Plan Name: Stormtech - Reduction Plan - 1-Year Plan			
	Strategy Name	Estimated Impact	Targeted Activity Type(s)
Considering	Air Shipping Minimum Price	Medium	Transport Goods
Considering	Delivery Alternatives	Medium	Transport Goods
Planned	Digital Marketing	Medium	Other
Considering	Plastic Curtains	Medium	Electricity, Heat, Other
Considering	Recycled Paper	Medium	Other
Planned	Reduce Paper Consumption	Medium	Other
Considering	Reminders to Keep Doors Closed	Low	Electricity, Heat
Implemented	Thermostat Settings	Medium	Electricity, Heat
Considering	Utility Consumption Monitoring	Medium	Electricity, Heat
Planned	Warehouse Location	Medium	Transport Goods
Implemented	Window Maintenance	Medium	Electricity, Heat

## Methodology

As a Climate Smart certified business, Stormtech conducted its GHG emissions inventory according to the [Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition](#). The GHG Protocol is an internationally recognized standard published by the World Resources Institute and the World Business Council on Sustainable Development.

## Organizational Boundaries

Stormtech used the operational control approach to determine its organizational boundary and included in its inventory all operations and facilities over which it has operational control.



## Inventory Boundaries

The GHG Protocol requires the inclusion of Scope 1 and 2 emissions, and suggests including Scope 3 emissions from activities relevant to an organization’s business and goals, and for which reliable data can be obtained. Stormtech included emissions from the following activities under Scopes 1, 2 and 3:

**Scope 1:** includes direct GHG emissions from sources that are owned or controlled by the reporting company or organization

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Heat > Generated

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**Scope 2:** includes indirect GHG emissions from purchased electricity and purchased heat

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Electricity > Purchased

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**Scope 3:** includes indirect GHG emissions that are consequences of the reporting company’s operations but occur at sources owned by another company

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Electricity > Unmetered/Unbilled

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Garbage

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Heat > Unmetered/Unbilled from Electricity

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Heat > Unmetered/Unbilled from Fuel

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Paper Consumption

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Staff Commuting

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Transporting Goods > Vehicles owned by others > Air

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Transporting Goods > Vehicles owned by others > Road

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Transporting Goods > Vehicles owned by others > Water

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The following activities were excluded from the inventory for the following reasons:

Excluded Activity	Reason for Exclusion
Business Travels (Transporting People > Air, Road and Water)	Not deemed material compared to other Scope 3 activities.

## Emission Factors

This inventory was conducted using the emissions factors from the Climate Smart web-based greenhouse gas management tool. The Climate Smart GHG management tool was designed for adherence to the GHG Protocol. Climate Smart’s emission factors come from a variety of sources, such as Environment Canada, the GHG Protocol Initiative, the US Environmental Protection Agency and the Intergovernmental Panel on Climate Change. Climate Smart reviews its emission factors annually to update them based on refined industry methodology and changing electricity grids.

Climate Smart also acknowledges that complete adherence to the Protocol requires the seven major greenhouse gases to be accounted for separately, and is working towards adding this feature at a future date. Further details on Climate Smart’s emission factors, their sources, and methodology for updating them are available upon request to [info@climatesmartbusiness.com](mailto:info@climatesmartbusiness.com).

## Sources of Data Included

Stormtech used the following sources of data to estimate their greenhouse gas emissions for the 2022 calendar year.

Activity	Data Source
Heat > Generated	The total giga-joules of natural gas used were entered based on utility bills.
Electricity > Purchased	The total kilowatt-hours of electricity used, based on utility bills, were entered into the Climate Smart software tool.
Electricity > Unmetered/Unbilled	The square footage occupied was entered to estimate electricity emissions using the average provincial intensity.
Garbage	The total estimated weight of garbage was entered into the Climate Smart tool.
Heat > Unmetered/Unbilled from Electricity	The square footage occupied was entered to estimate heating emissions using the average provincial intensity.
Heat > Unmetered/Unbilled from Fuel	The square footage occupied was entered to estimate heating emissions using the average provincial intensity.
Paper Consumption	The paper type, paper bond weight, number of reams used and post-consumer recycled content were entered. The paperweight and paper type were entered into the paper calculator ( <a href="http://papercalculator.org">http://papercalculator.org</a> ) to calculate emissions.
Staff Commuting	The distance commuted by each mode of transport was entered based on staff commuting survey.
Transporting Goods > Vehicles owned by others > Air	Distance travelled and weight for each parcel were entered.
Transporting Goods > Vehicles owned by others > Road	Distance travelled and weight for each parcel were entered.
Transporting Goods > Vehicles owned by others > Water	Distance travelled and weight for each parcel were entered.

## Recalculation

Climate Smart recommends a recalculation of baseline emissions if a change occurs that would equate to a change equal to or greater than five percent of company's total annual emissions. Situations triggering recalculation include structural changes (e.g., the acquisition or divestment of business units); changes in calculation methodology or improvements in accuracy of emission factors/activity data; or discovery of significant or cumulative errors.

For Stormtech's 2022 calendar year inventory, no recalculation was required.

Prepared on: February 28, 2024

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