B Corp Climate Leadership Measure What Matters Work Group A Guide for B Corps

How to calculate your carbon footprint & How to reduce and sequester carbon emissions

Measure What Matters work group members include Stonyfield, KeHE, All Good, Alter Eco, Method, Dr. Bronner, MegaFood & NativeEnergy. The work group wishes to thank the B Corps that pilot tested and provided feedback that informed this guide. January 2020.



1. Introduction

The B Corp community aspires to take more <u>urgent</u> action to combat climate change and build resilient businesses. This guide aims to help B Corps find high impact climate actions they can begin today and expand over time.

2. Goal

For every B Corp to estimate their carbon footprint and take at least one new climate action by June 2020.

3. Tips for Using this Guide

This guide and the B Corp community emphasize acting now, in the face of our climate emergency. This guide lists actions your business can take to have a meaningful climate impact. Select one or two that suit your situation, and get started. Revisit the list of actions regularly, to see what more you can accomplish, knowing climate action can also bring efficiencies to your business and foster stronger relationships with partners. This guide also shares resources for businesses that wish to calculate their climate impact, and additional resources that will help businesses wishing to learn more about the topic over time.

Please note that, at this time, the resources in this guide are primarily from U.S. sources.



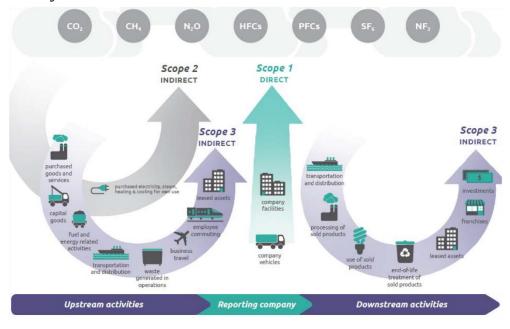
4. How to Calculate Your Carbon Footprint

4.1 Understanding Sources of Greenhouse Gas Emissions from Your Business

Oil, gas, coal are all forms of stored carbon in the ground from pre-human era. When we burn them for energy we release greenhouse gases into the atmosphere. Greenhouse gases trap heat, increasing the temperature of the earth. Our greenhouse gas emissions metric, or carbon footprint, is an aggregation of greenhouse gas emissions associated with our company. Global standards for calculating greenhouse gas emissions organize emissions by Scope 1, 2 and 3 (Figure from the GHG Protocol).

Companies, and especially B Corps, aim to reduce emissions in order to protect the

environment, improve health and wellbeing, stimulate green jobs and a greener economy, and operate more efficient, effective workplaces.





Scope 1 emissions are those that are owned or controlled by your business, including the combustion of fuels such as natural gas, diesel fuel, and gasoline in factories, fleets, and office buildings. Information on fuel combustion, which can be obtained from utility bills, can be used to calculate greenhouse gas emissions. Scope 1 also includes other onsite combustion, chemical reactions, and refrigeration and air conditioning leakage. If you do not own your own fleet or factories, then you may not have Scope 1 emissions.

For B Corps, the most likely sources of scope 1 emissions include those from fuel purchased for owned fleets, and for heating at facilities they own.

Scope 2 emissions are those caused in the generation of electricity purchased for office buildings, distribution facilities or warehouses. Information on electricity use, and the source of electricity generation (coal, hydro, nuclear) can be used to calculate greenhouse gas emissions. Scope 3 emissions are those caused in producing other inputs your business relies on, and in using any products you create.

Scope 3 emissions are generated when growing food and crops, or manufacturing plastics, your business may use in products or packaging, as well as shipping those materials. Scope 3 emissions are generated when your employees travel as part of doing business. Scope 3 emissions are also generated when you transport finished goods and when your customers refrigerate, wash and dry, or plug in the products you create.

If you are a product company, your Scope 3 emissions are likely your largest emissions and you may want specialist support to calculate the lifecycle emissions for your input materials.



4.2 Resources to Calculate Your Carbon Footprint

This is a brief list of carbon footprint calculators, compiled by B Corps, to help fellow B Corps get started. The most important goal of this guide is for businesses to select and take initiative on climate actions. Therefore, for most companies a simplified calculation of overall emissions will suffice to get started. For further support, look to experts and service providers in the B Corp directory, and the B Hive.

Cool Climate

An online calculator provided at coolclimate.berkeley.edu/business-calculator, this user-friendly calculator will provide an overview of total emissions from scopes 1, 2 and 3. Scope 3 emissions calculations are made simple, drawing on data from travel and spending on procurement. This calculator will suit a business that does not manufacture goods.

GHG Protocol Scope 3 Evaluator

This more indepth online calculator, provided at ghgprotocol.org/scope-3-evaluator, specifically calculates a businesses' scope 3 emissions. The calculator asks for input on spending and categorized that spend to estimate associated emissions. It also provides an external data collection sheet to help business gather the necessary information for their calculations. This calculator will provide more insight for companies that manufacture goods.

Carbon Fund

An online calculator provided at carbonfund.org/take-action/businesses/business-calculators, this user-friendly calculator will provide an overview of total emissions from scopes 1 and 2, as well as two categories of scope 3 emissions – travel and shipments. This calculator will suit a business that does not manufacture goods.

US Environmental Protection Agency

An in-depth process and downloadable tools provided at epa.gov/climateleadership/center-corporate-climate-leadership-ghg-inventoryguidance-low-emitters, this suite of tools cover scopes 1, 2 and 3. It requires more detailed inputs, and is well suited to small



manufacturers seeking a detailed inventory of sources of emissions from their business. Such detail will be helpful for companies that wish to identify emissions associated with specific aspects of their operations, versus an overview of total emissions.

To learn more about sources of emissions and how to avoid or reduce them, B Corps recommend the following resources:

- Greenhouse Gas Protocol, the internationally applied standard for estimating greenhouse gas emissions
- EPA Center for Corporate Climate Leadership
- SmartWay, from the US Environmental Protection Agency, enables companies that do not own their own fleets to ask their carriers to track and report emissions via SmartWay
- Energy Star Portfolio Manager, from the US EPA, helps companies track energy use, waste generation and water consumption
- Access funding and incentives for switching to renewable energy and adopting energy efficiency
- Climate Collaborative is an initiative of businesses in the natural products industry, providing resources to encourage climate action within that industry.

[Click for Link]

www.epa.gov/climateleadership

www.epa.gov/smartway

www.energystar.gov/buildings

www.dsireusa.org

www.climatecollaborative.com/resources



5. How to Reduce & Sequester¹ Carbon **Emissions**

5.1 Understanding the Types of Climate Action

The types of climate actions B Corps can take can be categorized as reducing directly, reducing indirectly, reducing broadly, or balancing.

To make a lasting transition to a low carbon, or even a carbon positive, economy, most agree that the first three types of climate action hold the most promise: reducing directly, reducing indirectly and reducing broadly.

To get started in the near term, balancing – or buying verified emission reduction credits – has a role to play in light of the current climate crisis.

Type of Climate Action	
Reducing Directly	Eliminating or reducing consumption of inputs that cause emissions by using fewer inputs or using
	them more efficiently (using less fuel, or using a more fuel efficient fleet). These climate actions occur
	within your business (your "four walls") and directly reduce your scope 1 and 2 emissions.

¹ The greenhouse gas carbon dioxide is drawn out of the atmosphere and sequestered in trees, other plants and soils. If managed, the sequestered carbon will remain stored for decades, helping reduce global greenhouse gas concentrations



Type of Climate Action	Type of Climate Action		
Reducing Indirectly	Purchasing and using inputs that emitted few, or fewer, emissions in the course of their production (low carbon fuels). These climate actions occur outside of your business (your "four walls") and can		
	indirectly reduce your scope 1, 2, or 3 emissions.		
Reducing Broadly	Creating change that causes "reducing indirectly" (above) to be possible. For instance, helping growers transition to low carbon or sequestration practices that will result in fewer emissions from the production of materials your business uses (cotton, cocoa butter). Another example would be helping contract manufacturers transition from oil to biomass boilers, for near zero emissions from energy use. These climate actions occur outside of your business (your "four walls"), most often in your supply chain, and can indirectly reduce your scope 3 emissions.		
Balancing	Purchasing credits to balance emissions your business has not avoided or reduced [Renewable Energy Credits (RECs) and carbon offsets ⁱ]. Carbon offsets can be purchased to balance scope 1, 2, and 3 emissions, while RECs can be purchased to balance scope 2 emissions.		

5.2 Taking Climate Action

This resource does not name every action B Corps can take to address greenhouse gas (often referred to as 'carbon') emissions. It does provide guidance on which actions are likely to have the highest climate benefits, to help B Corps focus their efforts. It also provides one or two resources to help B Corps get started.

After looking through the various climate actions, consider which actions you can influence and have a meaningful connection to your business. Next, explore the resources to see how your business can start on the climate action you selected. For example, if your company produces goods, explore the resources for buying and sourcing locally. If you are a service company, explore the resources



for reducing business travel and food waste. Once you have identified climate actions that are both relevant to your business and are within your scope of influence, set a timeline for taking action.

In addition to these resources, look to the B Corp Directory for companies that can help you with many of the climate actions described below. Remember to ask on the B Hive for support from your peers in the B Corp community.

Carbon Reduction & Sequestration Actions	Resources & Examples for Getting Started	
Scope One – Reduce directly	[Eliminating or reducing consumption of inputs that cause emissions by using fewer inputs or using them more efficiently (using less fuel, or a more fuel efficient fleet)]	
Reduce fleet use, including delivery frequency and route planning	Route Planning Optimization: [Click for Link] Reach out to fellow B Corp fleet optimization service providers	
Build a low- or zero-emissions fleet	Retrofit trucks and trailers: www.epa.gov/verified-diesel-tech www.driveelectricus.com www.cleanenergyfuels.com	
Reduce the use of purchased fuels for heating, with automated controls or by lowering temperatures	Energy Star – Stamp Out Energy Waste: [Click for Link]	
Identify refrigerant leaks from owned equipment and purchase refrigerants with low global warming potential	EPA Leak Testing Guide: [Click for Link]	
Scope One – Balance	[Purchasing credits to balance emissions your business has not avoided or reduced (offsets)]	



Carbon Reduction & Sequestration	Resources & Examples for Getting Started	
Actions		
Purchase carbon offsets from an existing	Connect with a fellow B Corp offset provider.	
greenhouse gas emission reduction project	www.nrdc.org/stories/should-you-buy-carbon-offsets	
	www.davidsuzuki.org/what-you-can-do/carbon-offsets/	
Scope Two – Reduce directly		
Shut equipment off at night and install timers		
and automated controls for equipment,	www.energystar.gov/buildings/offices	
heating, cooling, and lighting to reduce		
energy consumption		
Use Energy Star or other high efficiency	www.energystar.gov/products	
rated computers, printers, and office		
equipment to reduce energy consumption.	www.energystar.gov/products/lighting_fans	
Use natural lighting and low energy lighting		
Use Energy Star or other high efficiency	Energy Star – Heating and Cooling Upgrades: [Click for Link]	
rated heating and cooling equipment, and	Energy Star – Guide to Energy-Efficient Heating and Cooling: [Click for	
improve insulation and circulation	<u>Link</u>]	
Conduct an energy audit to identify high-		
return options for reducing energy	www.energy.gov/eere/femp/office-energy-checklist	
consumption		
Choose LEED certified buildings when	new.usgbc.org/leed	
purchasing or leasing space		
Scope Two – Reduce indirectly	[Purchasing and using inputs that generate few, or fewer, emissions (low	
	carbon fuels)]	
Build renewable energy generation on-site	www.namastesolar.com/commercial/commercial-industrial	



Carbon Reduction & Sequestration Actions	Resources & Examples for Getting Started	
	And the B Corp directory	
Purchase green energy from local utilities	Buying Clean Energy: [Click for Link]	
Scope Two – Reduce broadly	[Creating change that causes "reducing indirectly" to be possible]	
Collaborate with fellow B Corps or other peer companies to build a community-scale wind turbine	Estimate your electricity consumption, and connect with other electricity users - a combined electricity consumption of 8,000-12,000 MWh per year is enough to support a small turbine that can generate RECs for the participating companies over a ten-year period. For support, connect with a fellow <u>B Corp</u> renewables developer and learn about community renewables windexchange.energy.gov/markets/community	
Collaborate with fellow B Corps or other peer companies to build a community-scale solar array (in addition to generating RECs, solar arrays can also act as valuable pollinator habitats)	Estimate your electricity consumption, and connect with other electricity users - a combined electricity consumption of 8,000 MWh per year is enough to support a solar array that can generate RECs for the participating companies over a ten-year period. For support, connect with fellow B Corps or other solar developers. www.amicussolar.com	
Scope Two – Balance	[Purchasing credits to balance emissions your business has not avoided or reduced (offsets)]	
Purchase green energy via RECs from an existing project	www.epa.gov/greenpower www.buycleanenergy.org/find-recs	



Carbon Reduction & Sequestration	Resources & Examples for Getting Started	
Actions		
Participate in a Power Purchase Agreement ² with peers or other B Corp companies, including options at the municipal level	www.seia.org/research-resources/solar-power-purchase-agreements	
Purchase carbon offsets from an existing greenhouse gas emission reduction project	Connect with a fellow <u>B Corp</u> offset provider. <u>www.nrdc.org/stories/should-you-buy-carbon-offsets</u> <u>www.davidsuzuki.org/what-you-can-do/carbon-offsets/</u>	
Scope Three – Reduce directly		
Set a goal for zero food waste	www.wri.org/office-food-waste-challenge	
Reduce business travel	Video Conferencing: [Click for Link]	
Reduce employee commuting and provide incentives for public transport or non-fossil commuting options	WWF Reducing the Impact of Commuting: [Click for Link]	
Reduce shipping, and select rail or ocean	www.epa.gov/smartway	
transport over air and truck transport options	Unilever Sustainable Living Plan: [Click for Link]	
Improve efficiency of shipping (optimize loads, reduce and eliminate packaging)	Pallets to Increase Loading Efficiency: [Click for Link] Walmart Sustainable Packaging Playbook: [Click for Link]	
If you know specific waste types that are a significant source of greenhouse gas	www.zerowasteeurope.eu/zero-waste-in-business www.epa.gov/smm/wastewise	

² In a Power Purchase Agreement, a group of companies contract for both the power and green claims (RECs) from a renewable energy project. The power is sold locally at market rates, with a fixed amount going to the project to cover fixed project costs. Excess revenues go to the supporting companies and in turn, any shortfall is made up by supporting companies. The companies also receive the RECs. Typically, a collective electricity consumption of 30-40,000 MWh per year is enough to initiate a PPA. One simple approach is to structure the PPA around one anchor buyer, with subsequent buyers accepting the same contract structure (term, long term electricity pricing, etc.) as the anchor.



Carbon Reduction & Sequestration	Resources & Examples for Getting Started	
Actions		
emissions for your business, set a goal to	True Waste, Zero Waste Certification: true.gbci.org	
reduce those wastes		
Scope Three – Reduce indirectly		
Buy and source locally	B Resource, Local Purchasing Policy: [Click for Link]	
Ask large suppliers and carriers to measure	coolclimate.berkeley.edu/business-calculator	
and track greenhouse gas emission	www.epa.gov/smartway	
reductions		
Provide incentives to suppliers to reduce	US EPA Center for Corporate Climate Leadership – How to Engage	
emissions ⁱⁱ	Suppliers: [Click for Link]	
	EPA Supplier GHG questionnaire: [Click for Download]	
Identify refrigerant leaks from non-owned		
equipment and request refrigerants with low	EPA Leak Testing Guide: [Click for Link]	
global warming potential		
Source from suppliers employing	regenorganic.org/pilot	
regenerative agriculture practices	www.savory.global/land-to-market	
If you company operates in the financial		
sector, ensure your financial investments	<u>fossilfreefunds.org</u>	
support low carbon initiatives		
Scope Three – Broadly		
Generate carbon emission reductions, or	Identify sources of emissions in your supply base, identify behaviors or	
sequestration, within your supply base	technologies that reduce emissions, and catalyze change with education,	
(insets)	preferred purchasing terms, loans and funding	
	www.icroa.org/Insetting	



Carbon Reduction & Sequestration	Resources & Examples for Getting Started	
Actions		
	www.insettingplatform.com/	
Collaborate with fellow B Corps or other		
peer companies to sequester carbon and		
generate carbon offsets with a regenerative	www.marincarbonproject.org/carbon-farming	
agriculture and soil carbon sequestration		
project in a shared commodity such as	www.lifteconomy.com/rain	
wheat, cotton, soy, wool, sugar or others (a		
source of carbon offsets)		
Scope Three – Balance	[Purchasing credits to balance emissions your business has not avoided or	
	reduced (offsets)]	
Purchase carbon offsets from an existing	Connect with a fellow B Corp offset provider.	
greenhouse gas emission reduction project	www.nrdc.org/stories/should-you-buy-carbon-offsets	
	www.davidsuzuki.org/what-you-can-do/carbon-offsets/	



Appendix 1: GHG Protocol

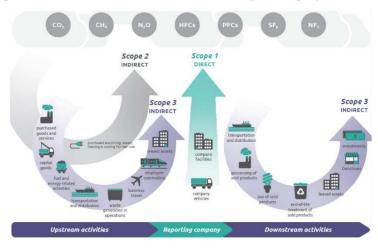
Per the GHG Protocol, there are 15 categories of impacts in your Scope 3 carbon footprint. The most common of these categories, likely to be relevant for many companies, are listed below, followed by the remaining categories.

	Common Scope 3 Categories
1	Purchased Goods & Services (everything you buy)
4	Upstream Transportation & Distribution (inbound materials, non-owned vehicles)
5	Waste Generated in Operations
6	Business Travel
7	Employee Commuting
9	Downstream Transportation & Distribution (outbound materials, non-owned vehicles)
10	Processing of Sold Products (before sale to final customer)
11	Use of Sold Products (by the final customer)
12	End-of-Life of Sold Products (recycle, landfill, incineration)

	Other Scope 3 Categories
2	Capital Goods
3	Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2
8	Upstream Leased Assets
13	Downstream Leased Assets
14	Franchises
15	Investments



GHG Protocol's 15 categories of scope 3 emissions are also included in the figure displayed in section 4.1 of this guide.



(Figure from GHG Protocol).

For more detailed information, linked below is an in depth guide to using carbon offsets produced by the GHG Management Institute and the Stockholm Environment Institute: www.offsetguide.org/wp-content/uploads/2019/11/11.26.19.2.pdf

ii Emerging Trends in Supply Chain Emissions Engagement, US EPA: [Click for Link]



¹ For information regarding carbon offsetting and insight into selecting carbon offsets, Natural Resource Defense Council and the David Suzuki Foundation offer explanations and advice for purchasing carbon offsets:

www.nrdc.org/stories/should-you-buy-carbon-offsets

www.davidsuzuki.org/what-you-can-do/carbon-offsets/