EPA CENTER FOR CORPORATE
CLIMATE
LEADERSHIP
U.S. Environmental Protection Agency

Center for Corporate Climate Leadership

EPA's GHG Management Tools & Resources

May 19, 2021

Presented by:

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Guest Speakers:

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Today's Agenda

Introduction and Webinar Logistics

Speaker Introductions

Topics

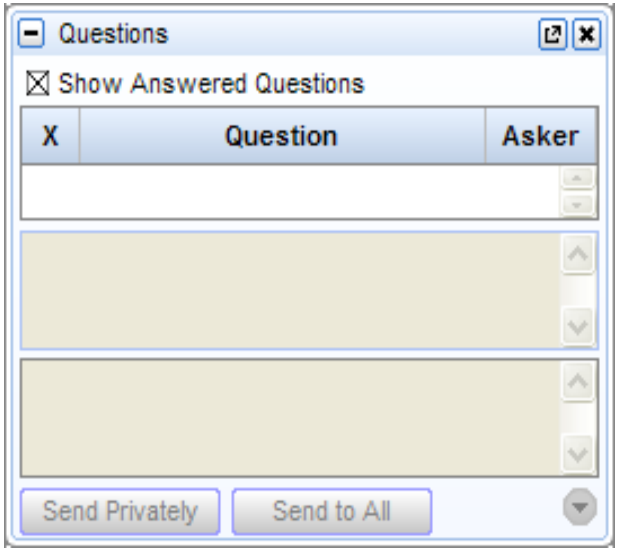
- Quick Poll
- About the Center
- The GHG Inventory Development Process
- Center for Corporate Climate Leadership Tools and Resources
- Organizational use case of SGEC: hear from OIA & Big Agnes

Q&A

Post-webinar Survey

Webinar Logistics

- Attendees are muted to minimize background noise.
- Submit questions in writing via the Questions box on your GoTo control panel. →→ →
- To minimize or maximize the control panel, click on the button at the top left of the tool bar.



- Today's presentation will be available at: https://www.epa.gov/climateleadership/center-corporate-climate-leadership-webinars-and-events

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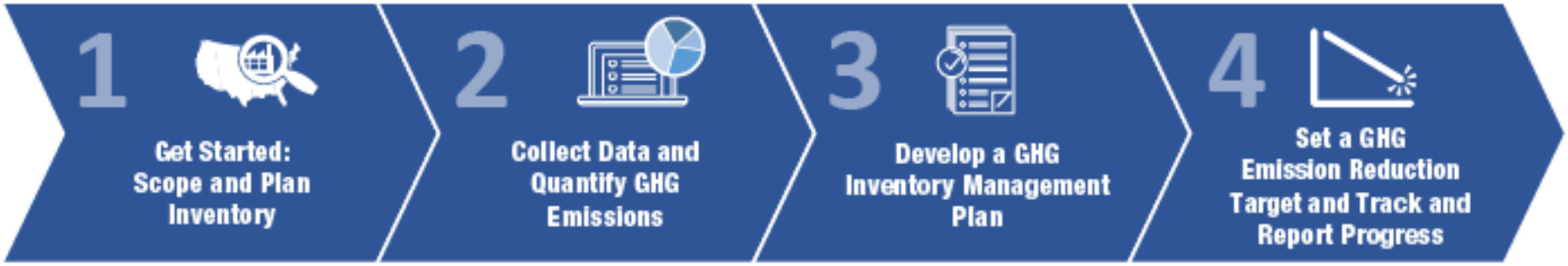
U.S. Environmental Protection Agency

About the Center

The U.S. EPA Center for Corporate Climate Leadership serves as a comprehensive resource to help organizations of all sizes measure and manage greenhouse gas (GHG) emissions.

- Provides technical tools, ground-tested guidance, educational resources, and opportunities for information sharing and peer exchange. Promote practices that reduce GHG emissions.
- Co-sponsor the Climate Leadership Conference & Awards with TCR & C2ES. 2021 10th Annual event: May 25 (virtual) and October 13-15 in New Orleans.

The GHG Inventory Development Process



- Review GHG accounting standards and methods for organizational reporting
- Determine organizational and operational boundaries
- Choose a base year
- Consider 3rd party verification

- Identify data requirements and preferred methods for data collection
- Develop data collection procedures, tools, and guidance tools
- Compile and review facility data (e.g., electricity, natural gas)
- Estimate missing data to fill gaps
- Choose emissions factors
- Calculate emissions

- Formalize data collection procedures and document process in Inventory Management Plan

- Finalize data
- Complete third-party verification (recommended)
- Report data as needed
- Prepare to set a publicly reported GHG target and track progress

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Step 1: Get Started: Scope and Plan Inventory

What's Involved

- Review GHG accounting standards and methods for organizational reporting
- Determine organizational and operational boundaries
- Choose a base year
- Consider 3rd party verification

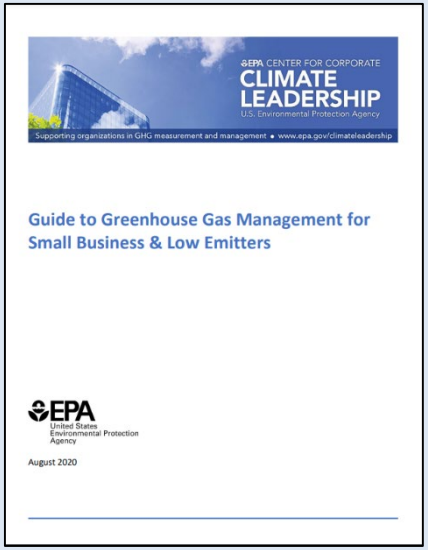
GHG Protocol Chapters

- Chapter 1: GHG Accounting and Reporting Principles
- Chapter 2: Business Goals and Inventory Design
- Chapter 3: Setting Organizational Boundaries
- Chapter 4: Setting Operational Boundaries
- Chapter 5: Tracking Emissions Over Time
- Chapter 10: Verification of GHG Emissions

EPA Resources

Small Business and Low Emitter Guide to Greenhouse Gas Management

- Provides an overview of the four steps to developing a GHG inventory.
- Intended for small businesses and low emitters, but the concepts are applicable to all organizations.



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Step 2: Collect Data and Quantify GHG Emissions

What's Involved

- Identify data requirements and preferred methods for data collection
- Develop data collection procedures, tools, and guidance materials
- Compile and review facility data (e.g., electricity, natural gas)
- Estimate missing data to fill gaps
- Choose emissions factors
- Calculate emissions

GHG Protocol Chapters

- Chapter 6: Identifying and Calculating GHG Emissions

EPA Resources

Scope 1 and Scope 2 Inventory Guidance

- Provides methods to calculate and report GHG emissions from these sources.

Scope 3 Inventory Guidance

- Provides resources and emission factors to help organizations develop a scope 3 emissions inventory.

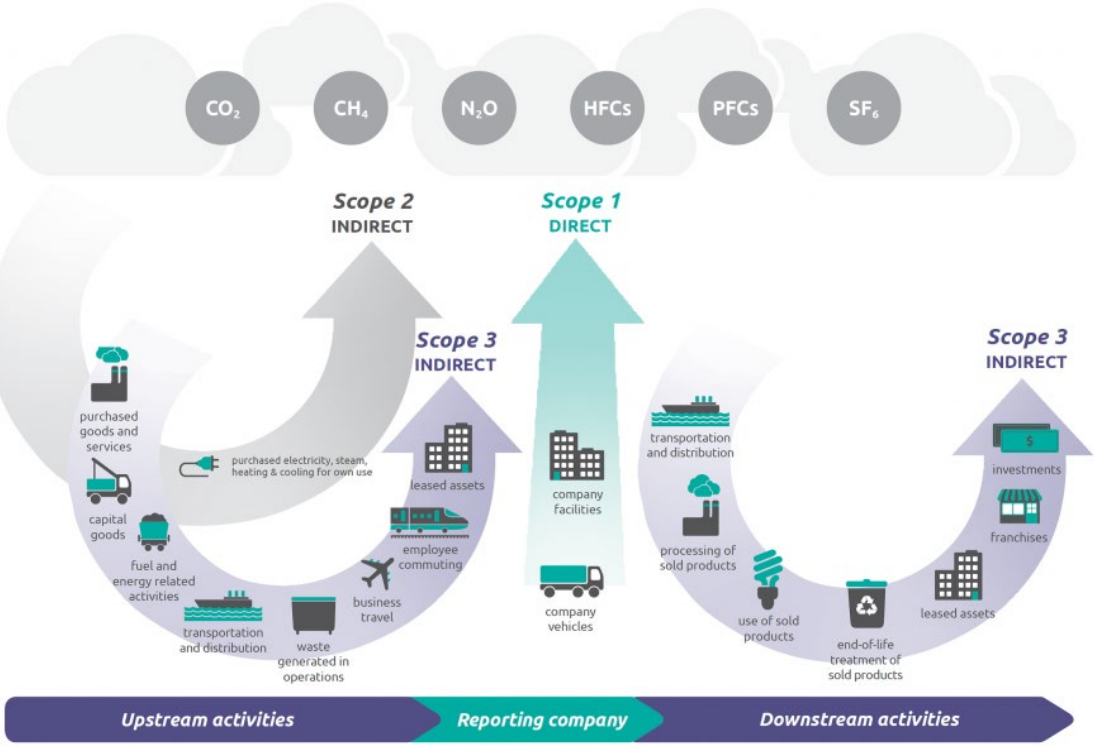
GHG Emission Factors Hub

- Provides organizations with a regularly updated, easy-to-use, and consolidated set of default emission factors with streamlined units for organizational GHG reporting.

Simplified GHG Emissions Calculator

- Simplified calculation tool to help small business and low emitter organizations estimate and inventory their annual GHG emissions.
- Determines the direct and indirect emissions from all sources at a company when activity data are entered into the various sections of the workbook for one annual period.

Scope 1, 2, 3 Inventory Guidance



- Scope 1 Guidance Documents:
  - Direct Emissions From Stationary Combustion
  - Direct Emissions From Mobile Combustion Sources
  - Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression, and Industrial Gases
- Scope 2 Guidance Documents:
  - Indirect Emissions From Purchased Electricity
- Scope 3 Guidance
  - Center's webpage

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GHG Emission Factors Hub

Provides organizations with a regularly updated and easy-to-use set of default emission factors for organizational greenhouse gas reporting

Scope 1 Factors

- Stationary combustion
- Mobile combustion

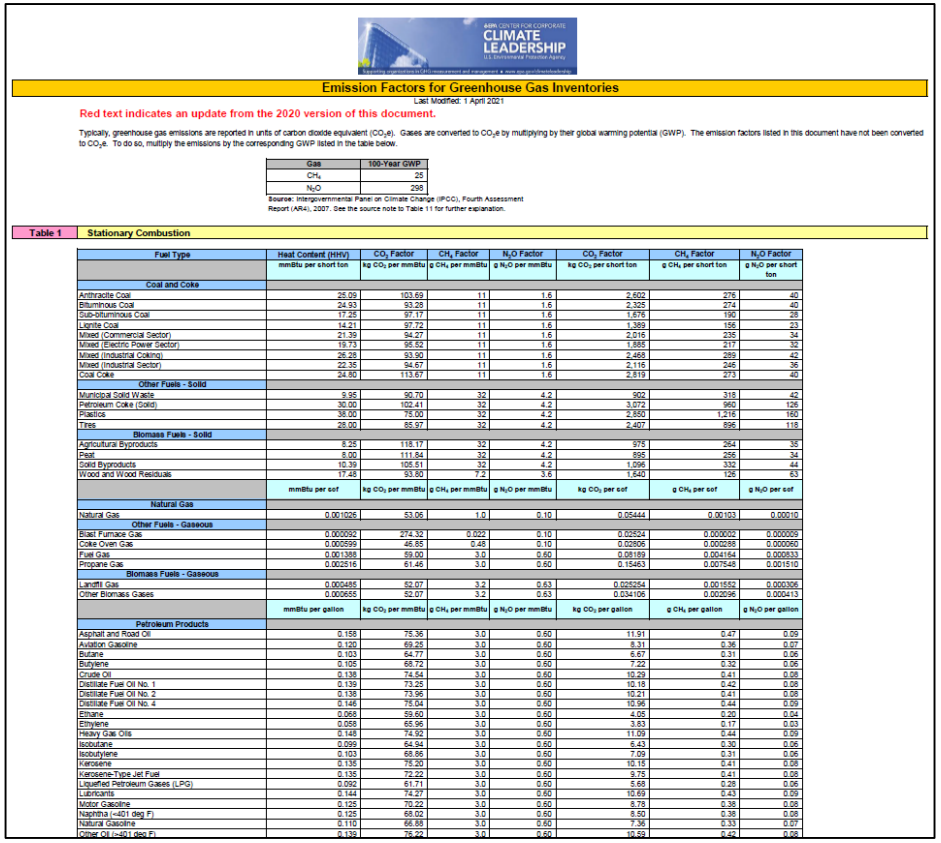
Scope 2 Factors

- Electricity
- Steam and heat

Scope 3 Factors

- Upstream/downstream transportation and distribution
- Waste generated in operations
- End-of-life treatment of sold products
- Business travel and employee commuting

https://www.epa.gov/climateleadership/ghg-emission-factors-hub



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Emission Factors for Greenhouse Gas Inventories

Last Modified: 1 April 2021

Red text indicates an update from the 2020 version of this document.

Typically, greenhouse gas emissions are reported in units of carbon dioxide equivalent (CO_2e). Gases are converted to CO_2e by multiplying by their global warming potential (GWP). The emission factors listed in this document have not been converted to CO_2e. To do so, multiply the emissions by the corresponding GWP listed in the table below.

Gas	100-Year GWP
CH_4	25
N_2O	298

Source: Intergovernmental Panel on Climate Change (IPCC), Fourth Assessment Report (AR4), 2007. See the source note to Table 11 for further explanation.

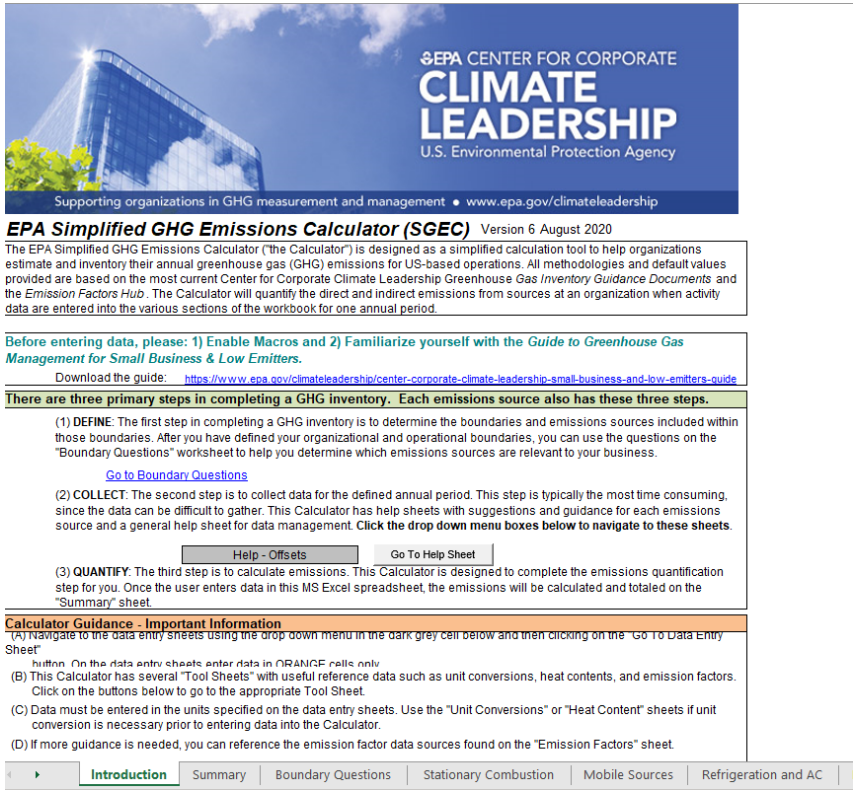
Table 1 Stationary Combustion

Fuel Type	Heat Content (HHV)	CO_2 Factor	CH_4 Factor	N_2O Factor	CO_2 Factor	CH_4 Factor	N_2O Factor
	mmBtu per short ton	kg CO_2 per mmBtu	g CH_4 per mmBtu	g N_2O per mmBtu	kg CO_2 per short ton	g CH_4 per short ton	g N_2O per short ton
Coal and Coke							
Anthracite Coal	25.09	103.69	11	1.6	2,602	276	40
Bituminous Coal	24.93	93.28	11	1.6	2,325	274	40
Sub-bituminous Coal	17.25	97.17	11	1.6	1,676	190	28
Lignite Coal	14.21	97.72	11	1.6	1,389	156	23
Mixed (Commercial Sector)	21.39	94.27	11	1.6	2,016	235	34
Mixed (Electric Power Sector)	19.73	95.52	11	1.6	1,885	217	32
Mixed (Industrial Coking)	26.28	93.90	11	1.6	2,468	289	42
Mixed (Industrial Sector)	22.35	94.67	11	1.6	2,116	246	36
Coal Coke	24.80	113.67	11	1.6	2,819	273	40
Other Fuels - Solid							
Municipal Solid Waste	9.95	90.70	32	4.2	902	318	42
Petroleum Coke (Solid)	30.00	102.41	32	4.2	3,072	960	126
Plastics	38.00	75.00	32	4.2	2,850	1,216	160
Tires	28.00	85.97	32	4.2	2,407	896	118
Biomass Fuels - Solid							
Agricultural Byproducts	8.25	118.17	32	4.2	975	264	35
Peat	8.00	111.84	32	4.2	895	256	34
Solid Byproducts	10.39	105.51	32	4.2	1,096	332	44
Wood and Wood Residuals	17.48	93.80	7.2	3.6	1,640	126	63
	mmBtu per scf	kg CO_2 per mmBtu	g CH_4 per mmBtu	g N_2O per mmBtu	kg CO_2 per scf	g CH_4 per scf	g N_2O per scf
Natural Gas							
Natural Gas	0.001026	53.06	1.0	0.10	0.05444	0.00103	0.00010
Other Fuels - Gaseous							
Blast Furnace Gas	0.000092	274.32	0.022	0.10	0.02824	0.000002	0.000009
Coke Oven Gas	0.000599	46.85	0.48	0.10	0.02806	0.000288	0.000060
Fuel Gas	0.001388	59.00	3.0	0.60	0.08189	0.004164	0.000833
Propane Gas	0.002516	61.46	3.0	0.60	0.15463	0.007548	0.001510
Biomass Fuels - Gaseous							
Landfill Gas	0.000485	52.07	3.2	0.63	0.025254	0.001552	0.000306
Other Biomass Gases	0.000655	52.07	3.2	0.63	0.034106	0.002096	0.000413
	mmBtu per gallon	kg CO_2 per mmBtu	g CH_4 per mmBtu	g N_2O per mmBtu	kg CO_2 per gallon	g CH_4 per gallon	g N_2O per gallon
Petroleum Products							
Asphalt and Road Oil	0.158	75.36	3.0	0.60	11.91	0.47	0.09
Aviation Gasoline	0.120	69.25	3.0	0.60	8.31	0.36	0.07
Butane	0.103	64.77	3.0	0.60	6.67	0.31	0.06
Butylene	0.105	68.72	3.0	0.60	7.22	0.32	0.06
Crude Oil	0.138	74.54	3.0	0.60	10.29	0.41	0.08
Distillate Fuel Oil No. 1	0.139	73.25	3.0	0.60	10.18	0.42	0.08
Distillate Fuel Oil No. 2	0.138	73.96	3.0	0.60	10.21	0.41	0.08
Distillate Fuel Oil No. 4	0.146	75.04	3.0	0.60	10.96	0.44	0.09
Ethane	0.068	59.60	3.0	0.60	4.05	0.20	0.04
Ethylene	0.058	65.96	3.0	0.60	3.83	0.17	0.03
Heavy Gas Oils	0.148	74.92	3.0	0.60	11.09	0.44	0.09
Isobutane	0.099	64.94	3.0	0.60	6.43	0.30	0.06
Isobutylene	0.103	68.86	3.0	0.60	7.09	0.31	0.06
Kerosene	0.135	75.20	3.0	0.60	10.15	0.41	0.08
Kerosene-Type Jet Fuel	0.135	72.22	3.0	0.60	9.75	0.41	0.08
Liquefied Petroleum Gases (LPG)	0.092	61.71	3.0	0.60	5.68	0.28	0.06
Lubricants	0.144	74.27	3.0	0.60	10.69	0.43	0.09
Motor Gasoline	0.125	70.22	3.0	0.60	8.78	0.38	0.08
Naphtha (<401 deg F)	0.125	68.02	3.0	0.60	8.50	0.38	0.08
Natural Gasoline	0.110	66.88	3.0	0.60	7.36	0.33	0.07
Other Oil (>401 deg F)	0.139	76.22	3.0	0.60	10.59	0.42	0.08

Simplified GHG Emissions Calculator

- Helps small business and low emitter organizations estimate and inventory their annual GHG emissions.
- Determines the direct and indirect emissions from all sources at a company when activity data are entered into the various sections of the workbook for one annual period.

https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator



Step 3: Develop a GHG Inventory Management Plan

What's Involved

- Formalize data collection procedures and document process in Inventory Management Plan

GHG Protocol Chapters

- Chapter 7: Managing Inventory Quality

EPA Resources

GHG Inventory Management Plan Checklist

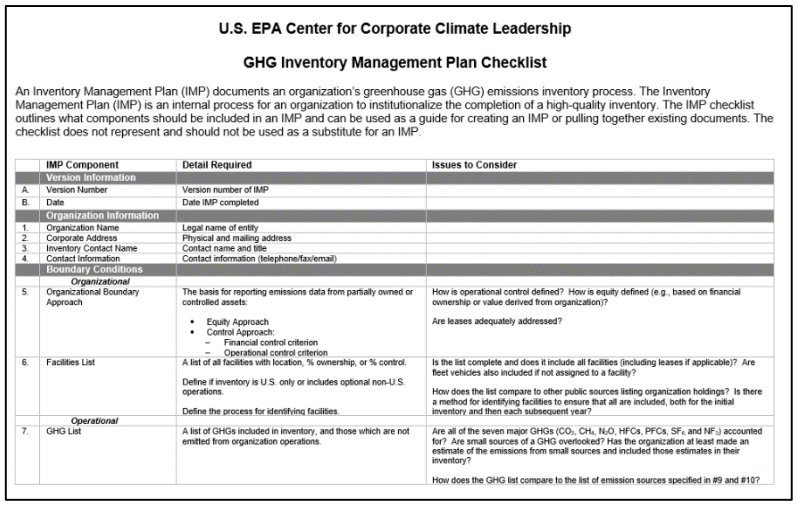
- Outlines the components that should be included in a high-quality IMP.
- Can be used as a guide for creating an IMP or pulling together existing documents.

Simplified Inventory Management Plan Form

- Provides a template for an organization to document its inventory development process.

IMP Checklist and Form

An Inventory Management Plan (IMP) describes an organization's process for completing a high-quality, corporate-wide greenhouse gas (GHG) inventory. Organizations use an IMP to institutionalize a process for collecting, calculating, and maintaining GHG data.

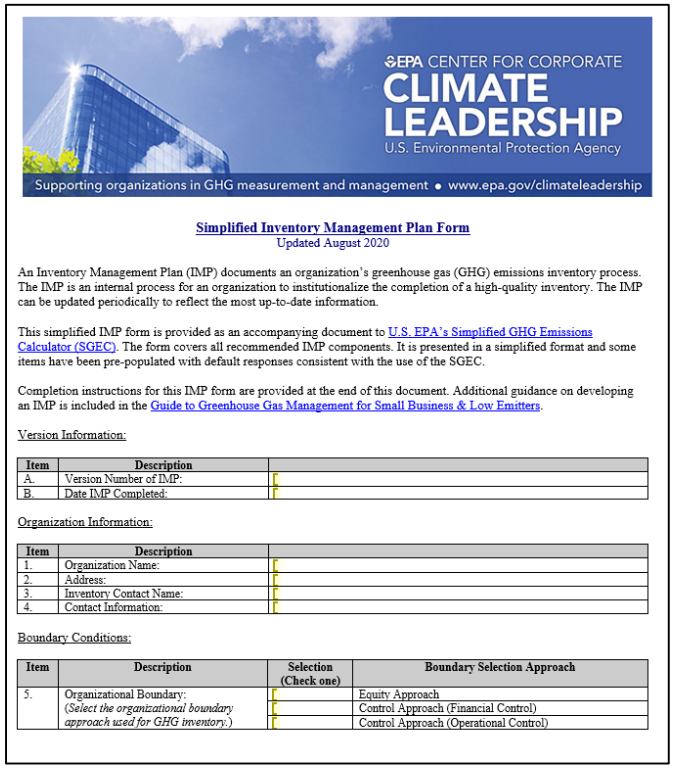


U.S. EPA Center for Corporate Climate Leadership

GHG Inventory Management Plan Checklist

An Inventory Management Plan (IMP) documents an organization's greenhouse gas (GHG) emissions inventory process. The Inventory Management Plan (IMP) is an internal process for an organization to institutionalize the completion of a high-quality inventory. The IMP checklist outlines what components should be included in an IMP and can be used as a guide for creating an IMP or pulling together existing documents. The checklist does not represent and should not be used as a substitute for an IMP.

	IMP Component	Detail Required	Issues to Consider
	Version Information		
A.	Version Number	Version number of IMP	
B.	Date	Date IMP completed	
	Organization Information		
1.	Organization Name	Legal name of entity	
2.	Corporate Address	Physical and mailing address	
3.	Inventory Contact Name	Contact name and title	
4.	Contact Information	Contact information (telephone/fax/email)	
	Boundary Conditions		
	Organizational		
5.	Organizational Boundary Approach	The basis for reporting emissions data from partially owned or controlled assets: • Equity Approach • Control Approach: – Financial control criterion – Operational control criterion	How is operational control defined? How is equity defined (e.g., based on financial ownership or value derived from organization)? Are leases adequately addressed?
6.	Facilities List	A list of all facilities with location, % ownership, or % control. Define if inventory is U.S. only or includes optional non-U.S. operations. Define the process for identifying facilities.	Is the list complete and does it include all facilities (including leases if applicable)? Are fleet vehicles also included if not assigned to a facility? How does the list compare to other public sources listing organization holdings? Is there a method for identifying facilities to ensure that all are included, both for the initial inventory and then each subsequent year?
	Operational		
7.	GHG List	A list of GHGs included in inventory, and those which are not emitted from organization operations.	Are all of the seven major GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and NF_3) accounted for? Are small sources of a GHG overlooked? Has the organization at least made an estimate of the emissions from small sources and included those estimates in their inventory? How does the GHG list compare to the list of emission sources specified in #9 and #10?



Simplified Inventory Management Plan Form
Updated August 2020

An Inventory Management Plan (IMP) documents an organization's greenhouse gas (GHG) emissions inventory process. The IMP is an internal process for an organization to institutionalize the completion of a high-quality inventory. The IMP can be updated periodically to reflect the most up-to-date information.

This simplified IMP form is provided as an accompanying document to U.S. EPA's Simplified GHG Emissions Calculator (SGEC). The form covers all recommended IMP components. It is presented in a simplified format and some items have been pre-populated with default responses consistent with the use of the SGEC.

Completion instructions for this IMP form are provided at the end of this document. Additional guidance on developing an IMP is included in the Guide to Greenhouse Gas Management for Small Business & Low Emitters.

Version Information:

Item	Description	
A.	Version Number of IMP:	
B.	Date IMP Completed:	

Organization Information:

Item	Description	
1.	Organization Name:	
2.	Address:	
3.	Inventory Contact Name:	
4.	Contact Information:	

Boundary Conditions:

Item	Description	Selection (Check one)	Boundary Selection Approach
5.	Organizational Boundary:		Equity Approach
	(Select the organizational boundary approach used for GHG inventory.)		Control Approach (Financial Control)
			Control Approach (Operational Control)

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More info:
https://www.epa.gov/climateleadership/inventory-management-plan-guidance

Step 4: Set a GHG Emission Reduction Target and Track and Report Progress

What's Involved

- Finalize data
- Complete third-party verification (optional)
- Report data as needed
- Prepare to set a publicly reported GHG target and track progress

GHG Protocol Chapters

- Chapter 8: Accounting for GHG Reductions
- Chapter 9: Reporting GHG Emissions
- Chapter 10: Verification of GHG Emissions
- Chapter 11: Setting a GHG Target

EPA Resources

Corporate GHG Inventorying and Target Setting Self-Assessment

- Helps organizations evaluate their approaches to GHG inventorying and target-setting.

Center for Corporate Climate Leadership Target Setting

- Provides information about and best practices for corporate target setting

Annual GHG Inventory Summary and Target Tracking Form

- Provides a format to summarize GHG emissions and track emissions over time against a GHG reduction target

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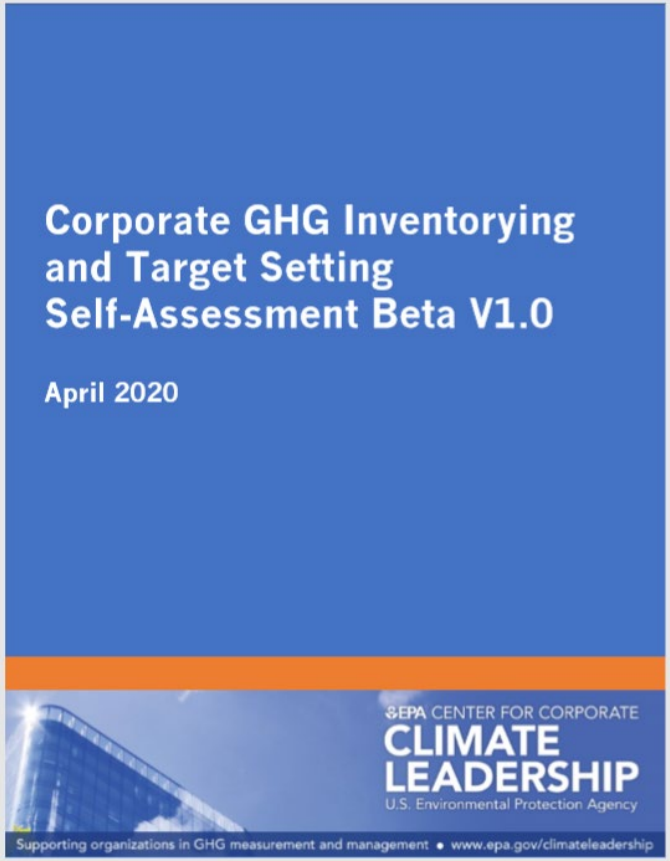
Corporate GHG Inventorying and Target Setting Self-Assessment

- Companies are often in a stronger position to improve their GHG management efforts once they understand their relative performance compared to their peers.
- This tool is designed to help companies evaluate, at a high level, how their GHG inventorying and target-setting approaches compare to large peer companies representing different industry sectors.
- Can be used by both leading companies and companies beginning to address their GHG emissions as an internal communication and management resource and a high-level benchmarking assessment.
- Three resources available:
  - Self Assessment Tool
  - Appendix: Development and Methodology
  - Insights on Corporate GHG Management: Inventorying and Target Setting



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Available at: https://www.epa.gov/climateleadership/corporate-ghg-inventorying-and-target-setting-self-assessment

Target Setting

Target Setting refers to organizations setting public GHG reduction targets, which can:

- Galvanize reduction efforts at an organization and often leads to the identification of additional reduction opportunities.
- Help garner senior management attention and increase funding for internal GHG reduction projects.
- Encourage innovation, improve employee morale, and help in the recruiting and retention of qualified employees.

"Science-based targets provide a clearly-defined pathway for companies to reduce GHG emissions, helping prevent the worst impacts of climate change and future-proof business growth" -SBTi

Target Setting

Best Practices:

- Targets should be publicly declared/reported
- Targets should include a base year and the target year
- Targets should be aggressive
- Targets should be for an absolute reduction in GHG emissions
- Targets should cover global operations in their geographic boundaries
- Targets should address all three emission scopes

Publicly declared targets should include all the above information.
Example: "ACME commits to a 35% absolute reduction of scope 1, 2, and 3 global emissions by 2030 from 2020 levels."

https://www.epa.gov/climateleadership/target-setting

Supply Chain Guidance

Information for Reducing Supply Chain Emissions:

- Why engage suppliers?
- How to engage suppliers
- Building internal support
- Leveraging third-party programs
- Scope 3 inventory guidance
- Success stories
- Sector Spotlight: Electronics

- https://www.epa.gov/climateleadership/supply-chain-guidance

Other EPA GHG Reduction Programs: Energy Efficiency, Renewable Energy, Supply Chain

- **ENERGY STAR**: delivers technical information and tools that organizations and consumers need to choose energy-efficient solutions and best management practices (e.g., Portfolio Manager, an online tool to measure and track energy and water consumption, as well as greenhouse gas emissions).
- **State and Local Energy Program**: helps state, local, and tribal governments develop policies and programs that can reduce GHG emissions, lower energy costs, improve air quality and public health, and help achieve economic development goals.
- **Green Power Partnership (GPP)**: encourages organizations to use green power as a way to reduce the environmental impacts associated with conventional electricity use.
- **Combined Heat and Power (CHP) Partnership**: promotes the use CHP to reduce the environmental impacts of power generation, increase facility operational efficiency, and decrease energy costs.
- **Green Suppliers Network**: works with large manufacturers to engage their suppliers in low-cost technical reviews to identify strategies for improving process lines, using materials more efficiently, and reducing waste.

Other EPA GHG Reduction Programs: Waste Reduction and Diversion

- **Resources for Waste Reduction and Recycling**: provides resources related to waste reduction and recycling in the workplace.
- **WasteWise**: helps partner companies meet goals to reduce and recycle municipal solid waste and selected industrial wastes.
- **WaterSense**: partners with manufacturers, retailers and distributors, and utilities to bring WaterSense labeled products to the marketplace and make it easy to purchase high-performing, water-efficient products.

Other EPA GHG Reduction Programs: Methane Emissions & Transportation

- **AgSTAR**: promotes the use of biogas recovery systems to reduce methane emissions from livestock waste.
- **Landfill Methane Outreach Program (LMOP)**: promotes the use of landfill gas as a renewable, green energy source.
- **Natural Gas STAR**: provides a framework for companies with U.S. oil and gas operations to implement methane reducing technologies and practices and document their voluntary emission reduction activities.
- **Natural Gas STAR Methane Challenge**: recognizes oil and natural gas companies that make specific and transparent commitments to reduce methane emissions.
- **SmartWay**: a public/private collaboration between EPA and the freight transportation industry that helps freight shippers, carriers, and logistics companies improve fuel-efficiency and save money.


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ROLE OF THE EPA'S GHG MANAGEMENT TOOLS
Jessie Curry
Sustainable Business Innovation Manager
Outdoor Industry Association

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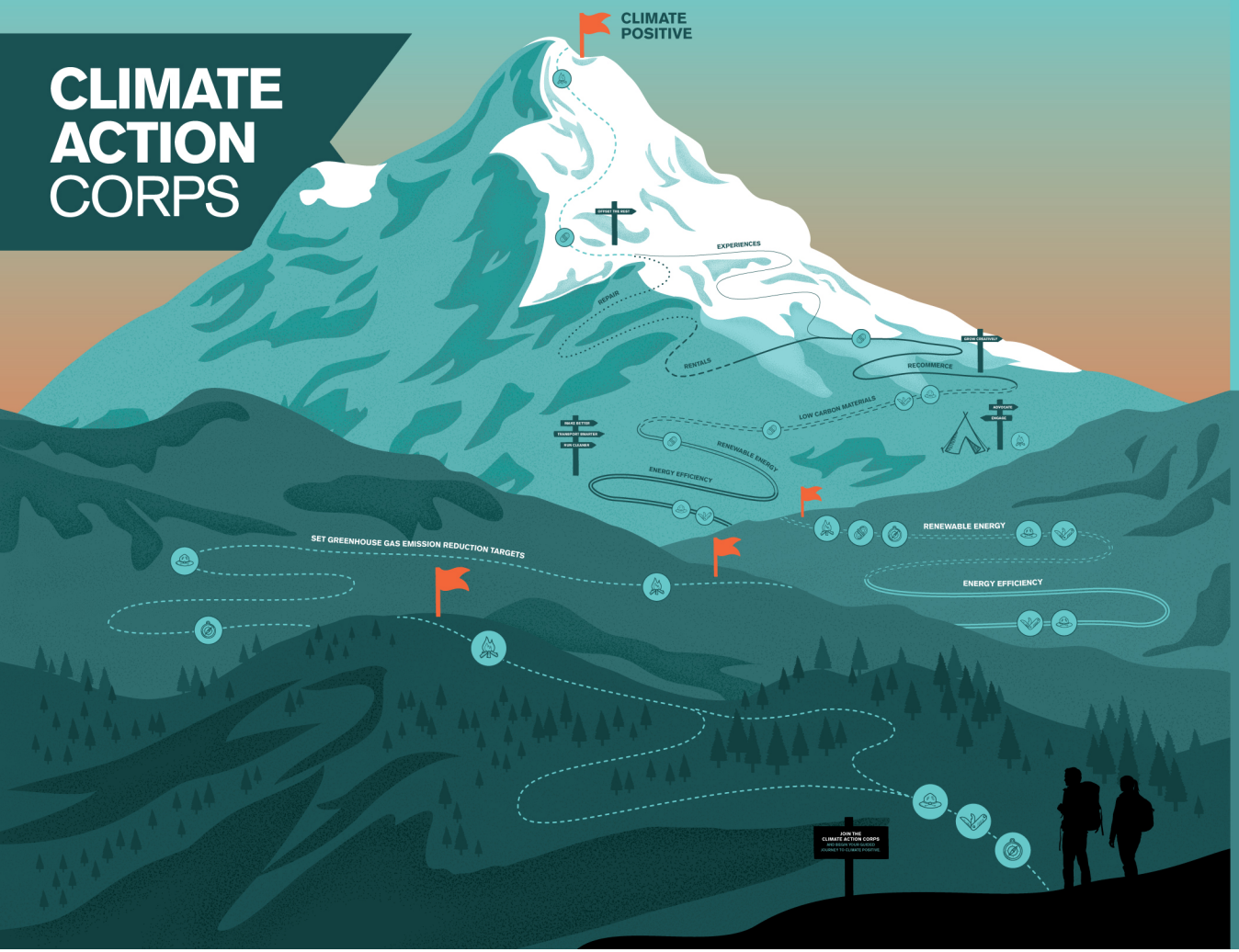

MEASURE. PLAN. REDUCE.

THE OUTDOOR INDUSTRY IS COLLABORATING TO LEAD ON CLIMATE ACTION.

JOIN US TODAY!

LEGEND

- **MEASURE**
- **PLAN**
- **REDUCE**
  SCOPE 1: DIRECT EMISSIONS
  (e.g. company-owned facilities and vehicles)
  SCOPE 2: INDIRECT EMISSIONS
  (e.g. purchased electricity from utilities)
- **REDUCE**
  SCOPE 3: INDIRECT EMISSIONS IN THE VALUE CHAIN
  (e.g. materials, manufacturing, consumer use phase, etc.)

- **GUIDANCE**
- **TRAININGS**
- **TOOLS**
- **COMMUNITY**
- **CO-LABS**
- **SHARE PROGRESS**
- **GUIDING PRINCIPLES**

- **THE COLLECTIVE PATH**
- **ENERGY EFFICIENCY** (SCOPE 1 & 2)
- **RENEWABLE ENERGY** (SCOPE 1 & 2)
- **ENERGY EFFICIENCY** (SCOPE 3)
- **RENEWABLE ENERGY** (SCOPE 3)
- **LOW CARBON MATERIALS**
- **RECOMMERCE**
- **RENTALS**
- **REPAIR**
- **EXPERIENCES**

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IN PARTNERSHIP WITH: peopleforbikes

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PATH TO CLIMATE POSITIVE

Companies who join the Climate Action Corps are taking steps to:

MEASURE + PLAN.

Build a company-specific plan.

Measure your scope 1, 2 and 3 emissions.

Set a science-based target (SBT) that includes all scopes within your 2nd year of joining.*

REDUCE + REMOVE.

Take immediate and ongoing action to drive down emissions in line with SBT.

Remove >100% remaining emissions by investing in direct projects or offsets, ideally nature-based.

ADVOCATE + ENGAGE.

Participate in climate advocacy actions annually.

Empower consumer climate action.

SHARE.

Submit your public Annual Progress Report.*

** Member requirement.*

ALL MEMBERS COMMIT TO RECOGNIZE + REWARD THESE CLIMATE-LEADING PRACTICES W/ VENDORS

COMPANY RESOURCES

MEASURE + PLAN.

REDUCE + REMOVE.

ADVOCATE + ENGAGE.

SHARE.

Guidance + Case Studies tailored to outdoor industry

Trainings live & pre-recorded

Online Community of 200+ peers

Tools to measure

Impact CoLabs

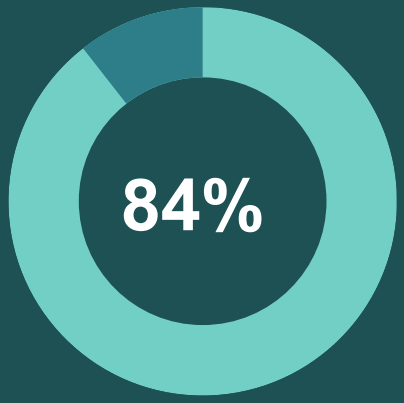
Education & Curation

Advocacy Actions

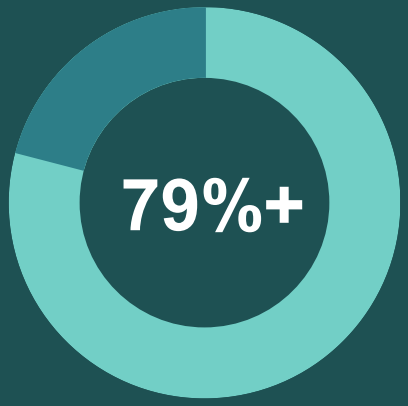
Marketing & Media

Individual Report

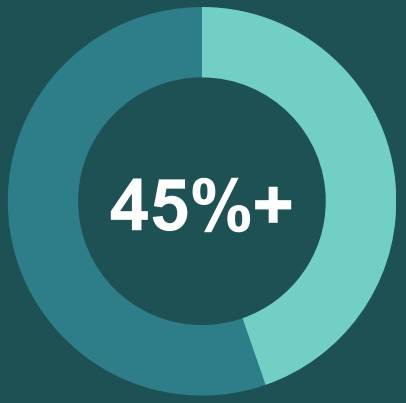
Industry-wide Report



MEASURED SCOPE 1&2 GHG



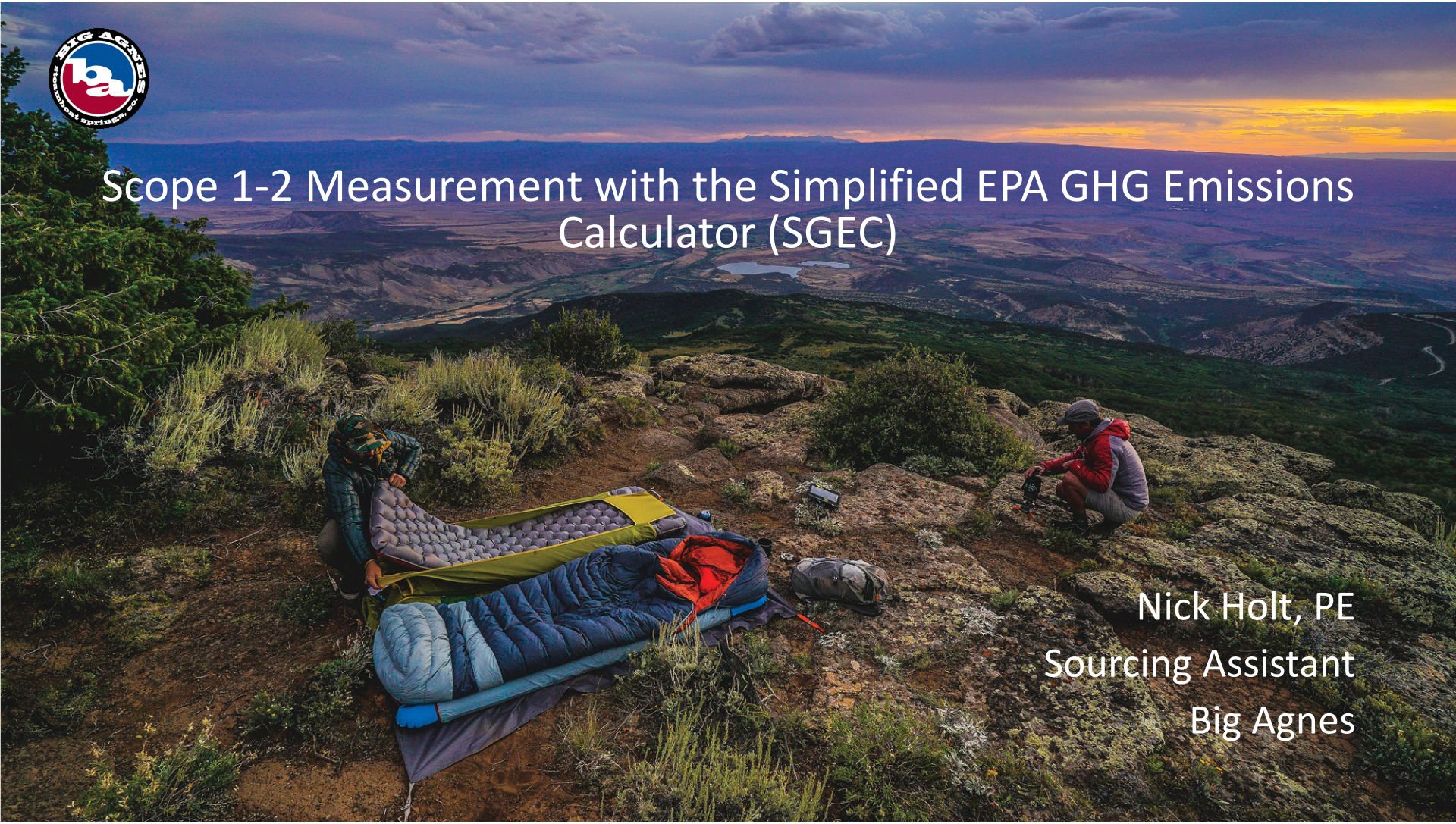
SET SCOPE 1&2 TARGETS
(OR IN PROGESS)



COMMITTED TO RENEWABLE ENERGY
(U.S.)


JOIN THE
CLIMATE
ACTION
CORPS
JOIN + LEARN MORE
outdoorindustry.org/CLIMATEACTION

Scope 1-2 Measurement with the Simplified EPA GHG Emissions Calculator (SGEC)



Nick Holt, PE
Sourcing Assistant
Big Agnes

Sustainability at Big Agnes

Committed at the core - founder Bill Gamber has lived off the grid for 25+ years

- Founding member of OIA Climate Action Corps & longtime OIA Sustainability Working Group member
- Two-year collaboration with OIA as HIGG Index Brand Module pilot brand
- Steamboat warehouse/ repair facility runs on wind power
- Adopted a Restricted Substance List to guide sourcing and production decisions

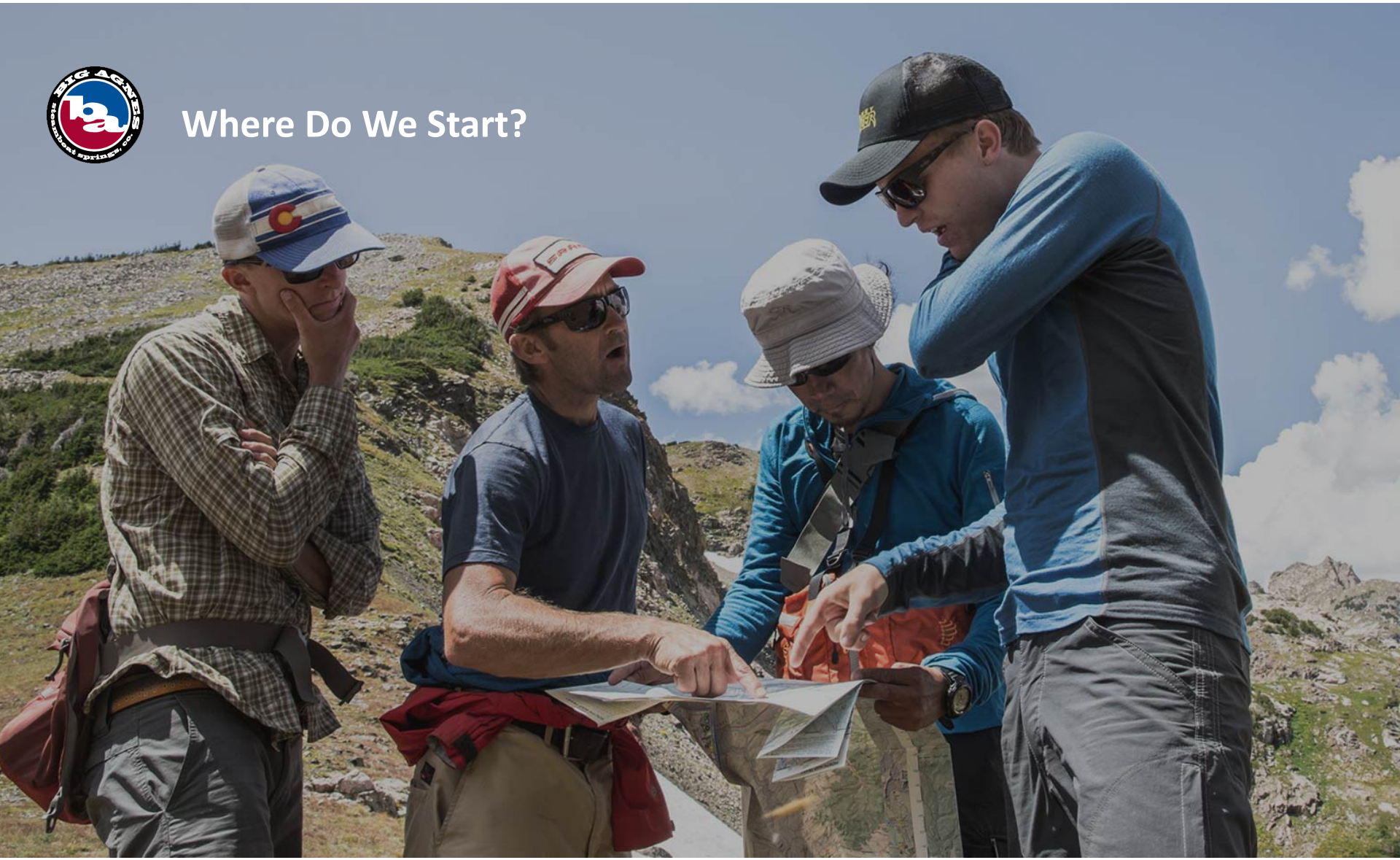
Product:

- 2021 Tiger Wall and Fly Creek models made with Solution Dyed fly and body fabrics – an industry first.
- 2021 TwisterCane™ Closed Cell Foam pad made with 70% sugarcane extract/ carbon negative foam – an industry first.
- Pioneers with some of the first tents and sleeping bags made from 100% recycled fabrics
- All DAC tent poles used incorporate DAC proprietary Green Anodizing
- 100% of our down is RDS Certified DownTek with Downtracker traceability with a PFC-fre certified PFOA and PFOS free water-repellent chemistry
- Majority of synthetic sleeping bags feature recycled insulation
- 2020 Sleeping pads include Pad Inflation Sacks all made from upcycled fabric
- FSC Certified paper or paperboard used in all printed materials/ packaging

People:

- Industry Days benefit
- Staff commuter incentives
- 2018 CDT Hike and 72 mile adoption
- Ski Pass/Health reimbursement wellness benefits

Where Do We Start?



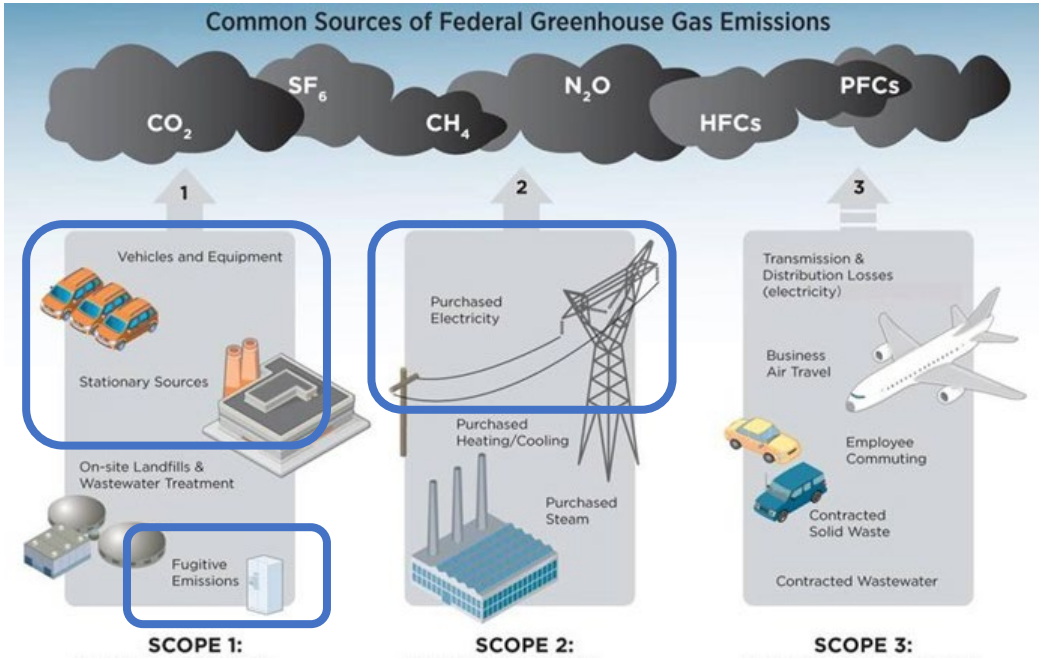
“The data is out there.”

- Professor James Hunt

Scope

- Base Year = Calendar Year 2019
- Locations
  - HQ – Steamboat Springs, CO
  - Warehouse – Steamboat Springs, CO
  - Warehouse – Salt Lake City, UT
- Markets
  - Steamboat Springs, CO and Salt Lake City, UT

Data Sources



Scope	Category	Data Source	Frequency	Key Unit	Who to Contact
1	Stationary Combustion	Natural Gas Bills	Monthly	Therm - Energy	Accounting
1	Mobile Sources	Credit Card Receipts	Annual	Gallon - Gasoline	Accounting
1	Refrigeration/AC Equipment	HVAC Technician	Annual	Lb - Refrigerant	Facilities
2	Purchased Electricity	Electrical Bills	Monthly	kWh - Energy	Accounting

Data Sources

MEASURE.

GETTING STARTED WORKSHEET

CLIMATE ACTION CORPS

1. **BASE YEAR**

2019

QUICK TIP
Track with your company fiscal year for consistency.

2. **ORGANIZATIONAL BOUNDARY**

Big Agnes Headquarters/Office, Steamboat Springs, CO
Big Agnes Warehouse/Repair Center, Steamboat Springs, CO
Big Agnes Warehouse, Salt Lake City, UT

NEED MORE SPACE TO WRITE?
You can find an editable version in the online community.

3. **TO DETERMINE OUR ORGANIZATIONAL BOUNDARY, WE ARE USING THE:**

☐ Equity Approach
☒ Control Approach

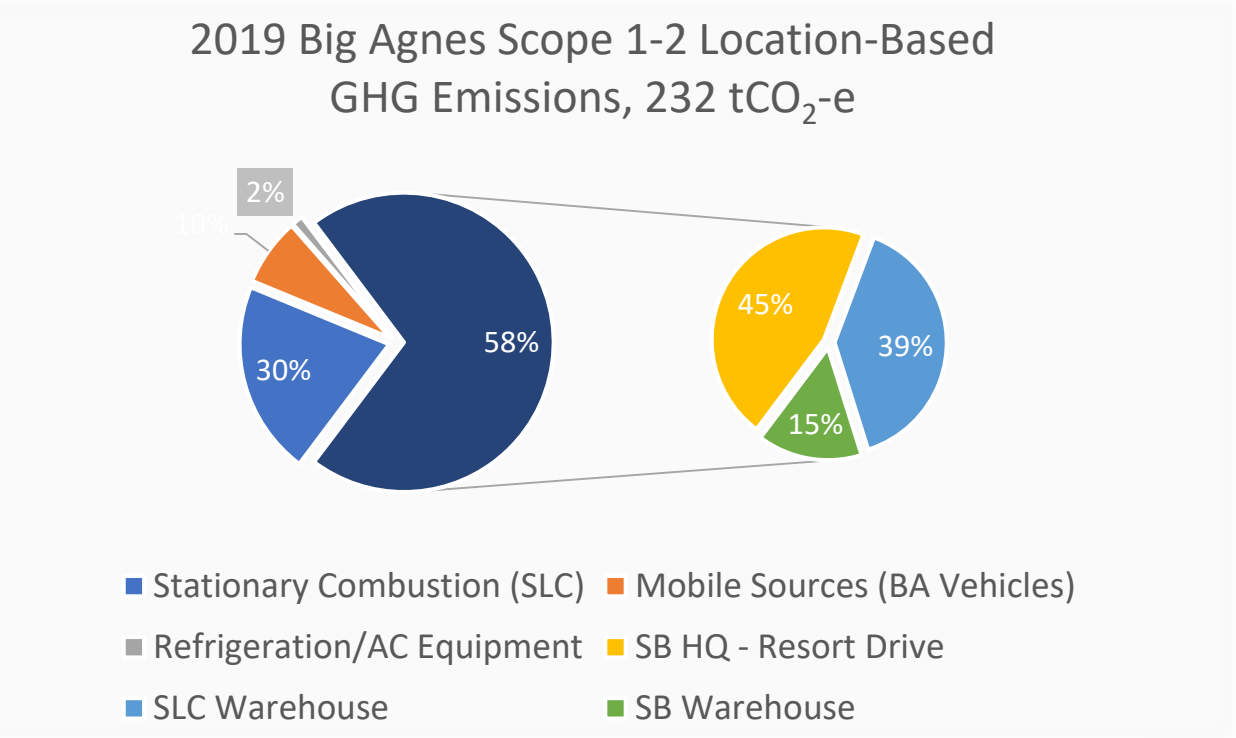
4. **OPERATIONAL BOUNDARY:** Identify emissions sources you will include in your operational boundary.

SCOPE 1	Natural Gas for heating SLC warehouse, BA company vehicle emissions, Refrigerants for Steamboat Springs HQ air conditioning
SCOPE 2	Purchased electricity for all locations, offsets through electrical utility programs
SCOPE 3	

5. **MEASUREMENT TOOL**

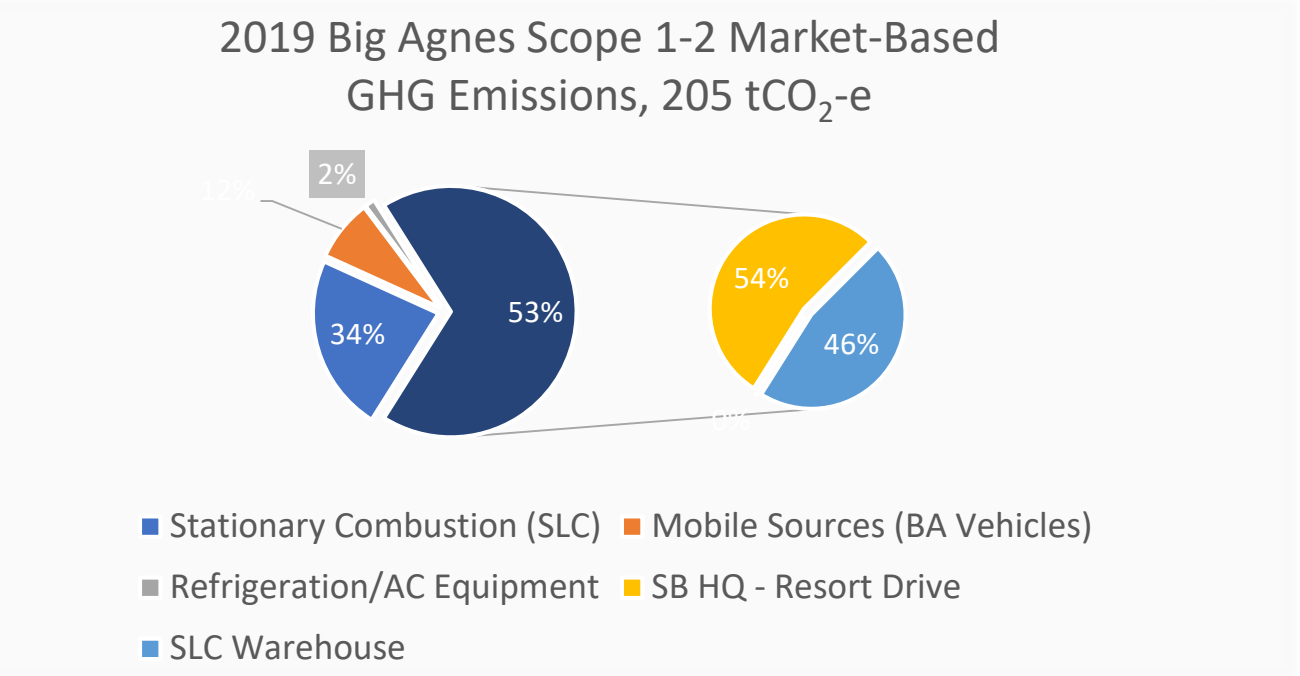
To calculate our Scope 1 and 2 emissions, we will use the following approach(es):	EPA Calculator (GHG Simplified Emissions Estimator)
To calculate our Scope 3 emissions, we will use the following approach(es):	TBD – mix of estimation based on material consumption, production, and transportation of goods

2019 Location-Based Emissions



- Top Categories
  - #1 – Electricity
  - #2 – Natural Gas
- Top Facilities
  - #1 – Salt Lake City Warehouse
  - #2 – Steamboat Springs Headquarters

2019 Market-Based Emissions



- Yampa Valley Electric Association Green Power REC Program saved 27 tCO_2-e in 2019
  - 12% Scope 1-2 Reduction
- We'd been offsetting tons of carbon since 2006 without knowing the relative impact

Impacts Since Measuring Scope 1-2

- The whole company knows about our GHG footprint
- Renewable Energy Credits (RECs) have more value
  - As of 2021, 100% of electricity in Big Agnes-controlled facilities are offset via utility-managed REC programs
- Actively seeking partnerships to offset remaining Scope 1-2 footprint, and future Scope 3 projects

GREEN YAMPA VALLEY ELECTRIC ASSOCIATION CHOICE

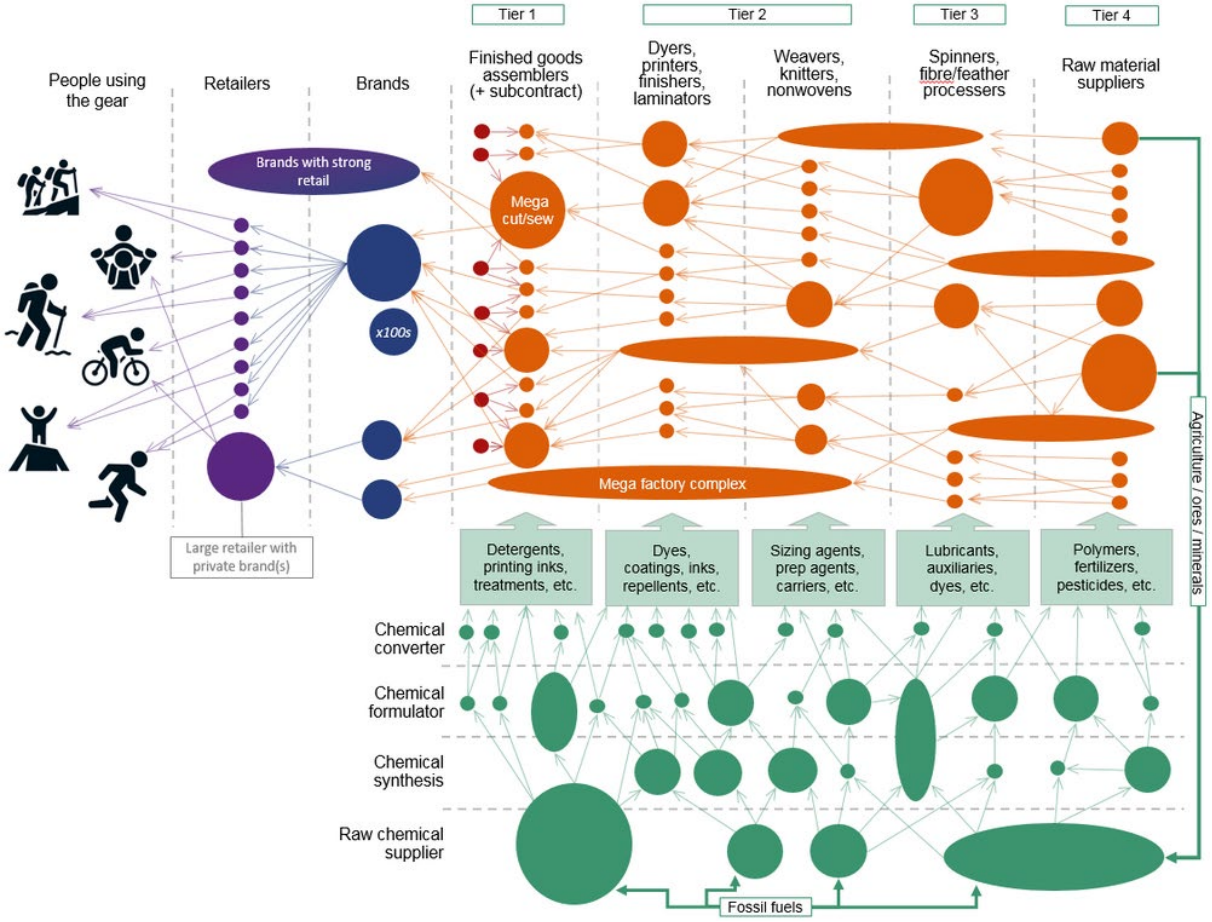
ROCKY MOUNTAIN POWER

BLUESKY RENEWABLE ENERGY

Lessons Learned

- Define your boundaries
- Don’t assume you know your biggest impacts
  - Double check your figures
- Accounting and facilities staff are your friends
- Record enough utility bill details the first time
  - Account #s, meter reads, billing periods, etc.
- Take regular readings going forward
  - After New Year’s → take odometer readings
- Ask for help from those who’ve come before you
  - It gets easier from here!
- **Know your audience to pitch the benefits!**

Scope 3 – The Final Frontier



Questions & Discussion

Contact Us

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For more information, visit www.epa.gov/climateleadership