



## Partners in Project Green

A Program of Toronto and Region Conservation Authority

# Energy Leaders Consortium

Getting Started on Scope 3 Carbon Emissions with Liam Conway from Carbonzero

July 13, 2023

We respectfully acknowledge that we are situated on the Traditional Territories and Treaty Lands, in particular those of the Mississaugas of the Credit First Nation, as well as the Anishinaabe of the Williams Treaty First Nations, the Huron Wendat, the Haudenosaunee, and the Metis Nation.

As stewards of land and water resources within the Greater Toronto Region, Toronto and Region Conservation Authority appreciates and respects the history and diversity of the land and is grateful to have the opportunity to work and meet on this territory.



# Additional Resources

- [yrnature.ca/acknowledging\\_land](http://yrnature.ca/acknowledging_land)
- [edgeofthebush.ca](http://edgeofthebush.ca)
- [native-land.ca](http://native-land.ca)
- Text 1-855-917-5263 with your City and Province to learn whose traditional territory you're on  
(standard text messaging rates may apply)



# A Collaborative Space for All

Proposed Operative Values for ELC meetings:

1. Balance airtime to hear from as many voices as possible
2. Be curious and challenge our own assumptions and biases
3. Be open to building on each other's suggestions or taking the conversation in another direction



# Agenda

Time	Activity
1:00pm – 1:15pm	Introduction
1:15pm – 1:45pm	Getting Started on Scope 3 Carbon Emissions with Carbonzero
1:45pm – 2:30pm	Q & A and Discussion Period



# Introduction



# Participant Introductions

- To introduce ourselves to presenters, special guests, or for new ELC members
  - Please turn on your camera if you can
  - Name
  - Position
  - Organization



# Upcoming ELC Sessions & PPG Events

Date	Topic
August 17th 1:00pm-2:30pm	<b>Member Roundtable</b> – led by Ferrero Canada (virtual)
September 14th 8:30am – 12:00pm	<b>Site Visit</b> – Molson-Coors Meeting & Tour (In-person)
September 23rd 9:00am-1:00pm	<b>PPG Members Only tree planting</b> – Claireville Conservation Area, Brampton (registration required)
October 19th 3:00pm – 6:00pm	<b>PPG's 15th Anniversary Celebration</b> – 300 City Centre Drive, Mississauga <i>"Meeting People Where They're At: Systemic Change, Partnerships and Moving Forward"</i>
October 26th 1:00pm-2:00pm	<b>Online Presentation</b> – Heat Battery Technology with Rondo Energy

Please contact Julia Kole if you are interested in hosting an ELC Site Visits, presenting at a Member Roundtable, or have suggestions for future learning sessions.





# Updates and Reminders

- **NRCan GIFMP Track 2 (Industrial Facilities)**- proposal due July 31, 2023. Eligible activities include:
  - Training for energy management practitioners
  - Energy assessments and audits
  - Energy managers
  - Energy management systems
  - Capital investments
  
- **IESO custom track in the Retrofit Program**- apply before Sept 1, 2023.



# Updates and Reminders

- **Funding opportunities through Centennial College:**

- Green mobility- anything EV, autonomous, hydrogen fuel cell (we have around 1 mil/year over 3 years) for applied research projects
- Subsidized Energy audits- 67% covered by the grant, report is accepted for green/eco designations
- NSERC Energy IE grant for software, prototyping, testing
- NRCan any green educational, outreach, demonstration (at the school of transportation).



# Today's Speaker



[Liam.conway@carbonzero.ca](mailto:Liam.conway@carbonzero.ca)

## **Liam Conway**

### **Vice President, Advisory Services and COO, Carbonzero**

Liam has oversight for Carbonzero's client deliverables, which include GHG Inventories and GHG Reduction Strategies. Liam's background in the environmental consulting sector has included positions in carbon management, ESG research, non-profit program management, and most recently in healthcare.

He has a Bachelors of Environmental Science and Geomatics from Wilfrid Laurier University, a post-graduate certificate in Environmental Management & Assessment from Niagara College, and has also completed training with the Greenhouse Gas Protocol, specifically the Greenhouse Gas Protocol Corporate Standard as well as the Scope 3 Standard.





**Carbonzero**





# Partners in Project Green – Energy Leaders Consortium

## Getting Started on Scope 3 Carbon Emissions with Carbonzero

Foundations and Insights for Tackling Scope 3

Liam Conway, Vice President, Advisory Services at Carbonzero

**carbonzero**

July 13, 2023

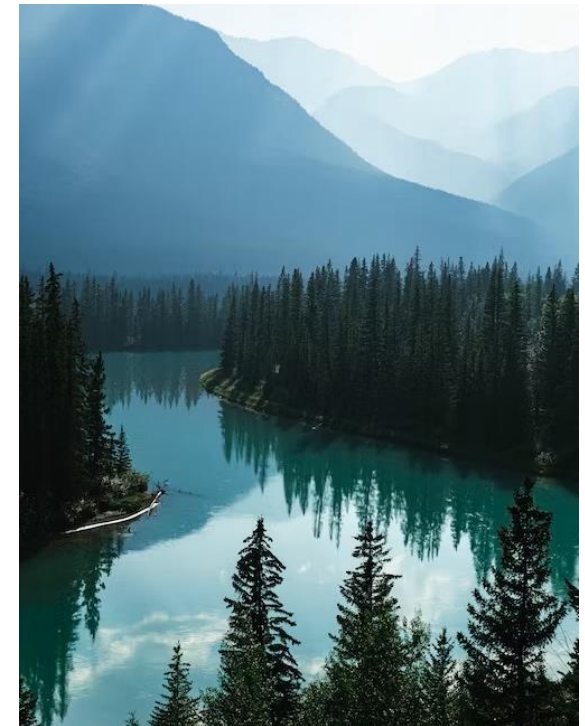
[www.carbonzero.ca](http://www.carbonzero.ca)



# Presentation Overview

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- About Carbonzero
- The GHG Reporting Landscape
  - The Challenge of Scope 3s
  - Selecting your Scope 3s
- Scope 3 Calculation Guidance
- Supplier Engagement Roadmap
- Next Steps & Takeaway Resources
- Contact Info & Q&A



# Carbonzero: Who We Are

## Advisory Services

- GHG Inventories
- GHG Reduction Strategies
- Green Event Services

## Project Sourcing & Development

- Carbon Offsets
- Renewable Energy Credits (RECs)
- Corporate Carbon Neutrality Goals

**17**  
Years in  
Operation

**100+**  
Corporate  
Clients

**14+**  
Industries  
Served

## Positioned for Continued Long-Term Growth

- Growing Core Team
- Leader in Canadian Carbon Offset Inventory
- Trusted Partner in Rapidly Growing Voluntary Carbon Market

# The GHG Reporting Landscape

Businesses see a far more complicated GHG reporting landscape than ten years ago.



Upcoming Mandatory Climate Reporting for US-Listed Publicly Traded Companies via the **Security and Exchange Commission**



SCIENCE  
BASED  
TARGETS

Setting GHG Reduction Targets that are **Science-Based** and aligned with a 1.5-degree warming scenario.



The **CDP** maintains an important role to solicit emissions data from global publicly-traded companies.



The **TCFD** worked to illustrate the relationship between climate disclosure and management policy & financial materiality.



The International Sustainability Standards Board (**ISSB**) have recently launched two Sustainability Disclosure Standards that intend to align and consolidate many past frameworks.



# The GHG Reporting Landscape

Businesses see a far more complicated GHG reporting landscape than ten years ago.



The SEC Climate Disclosure proposed rules see Scope 3 as optional until 2026, then material Scope 3s will be **required**.



SCIENCE  
BASED  
TARGETS

Science Based Targets **require** Scope 3 inclusion for any GHG Inventory where Scope 3 is estimated to be >40% of total GHG emissions.



The CDP does **not require** Scope 3 data in the Climate Change Questionnaire.



TASK FORCE ON  
CLIMATE-RELATED  
FINANCIAL  
DISCLOSURES

Scope 3 reporting (select categories based on materiality) is **recommended**.



Scope 3 reporting (select categories based on materiality) **is required**.

# The GHG Reporting Landscape

From a GHG Inventory perspective, the **good news** is that most of these programs still reference one GHG accounting & reporting standard as central to their participation.

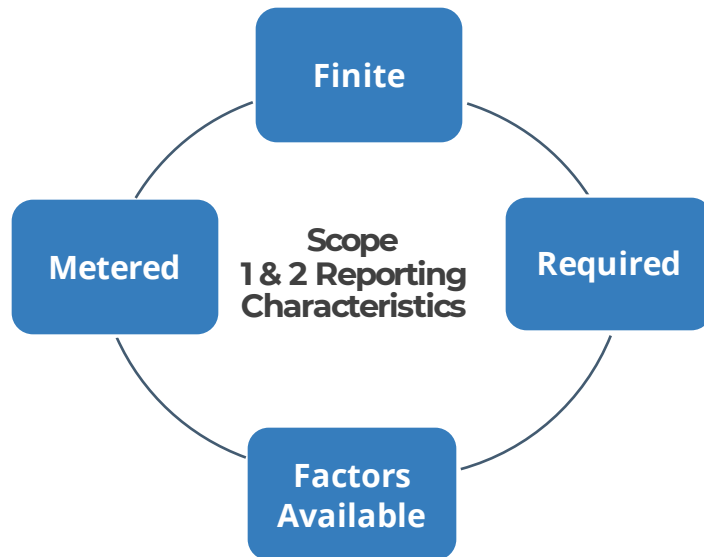


- GHG Inventory Boundary Setting
- Classifying Scope 1, 2, and 3 GHGs
- Guidance on Emission Factor Selection
- Reporting Requirements for GHG Protocol Compliance

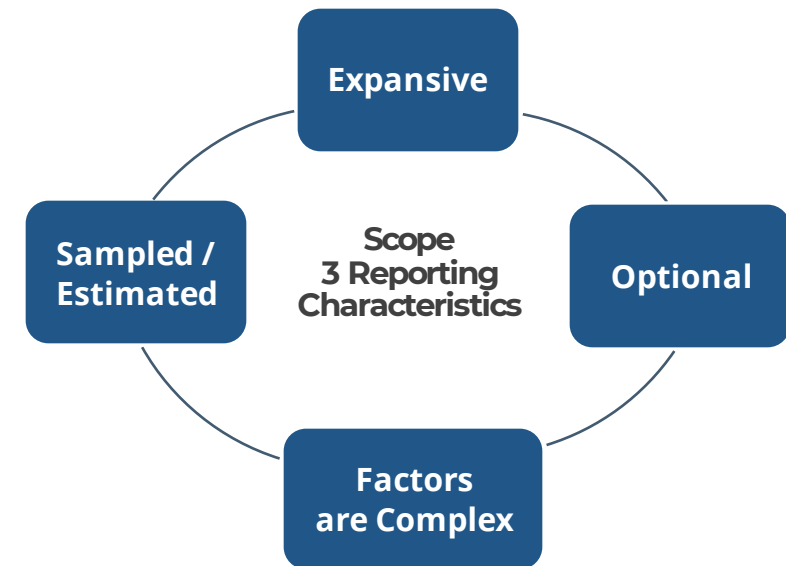
# Scope 3 – The Nature of the Challenge

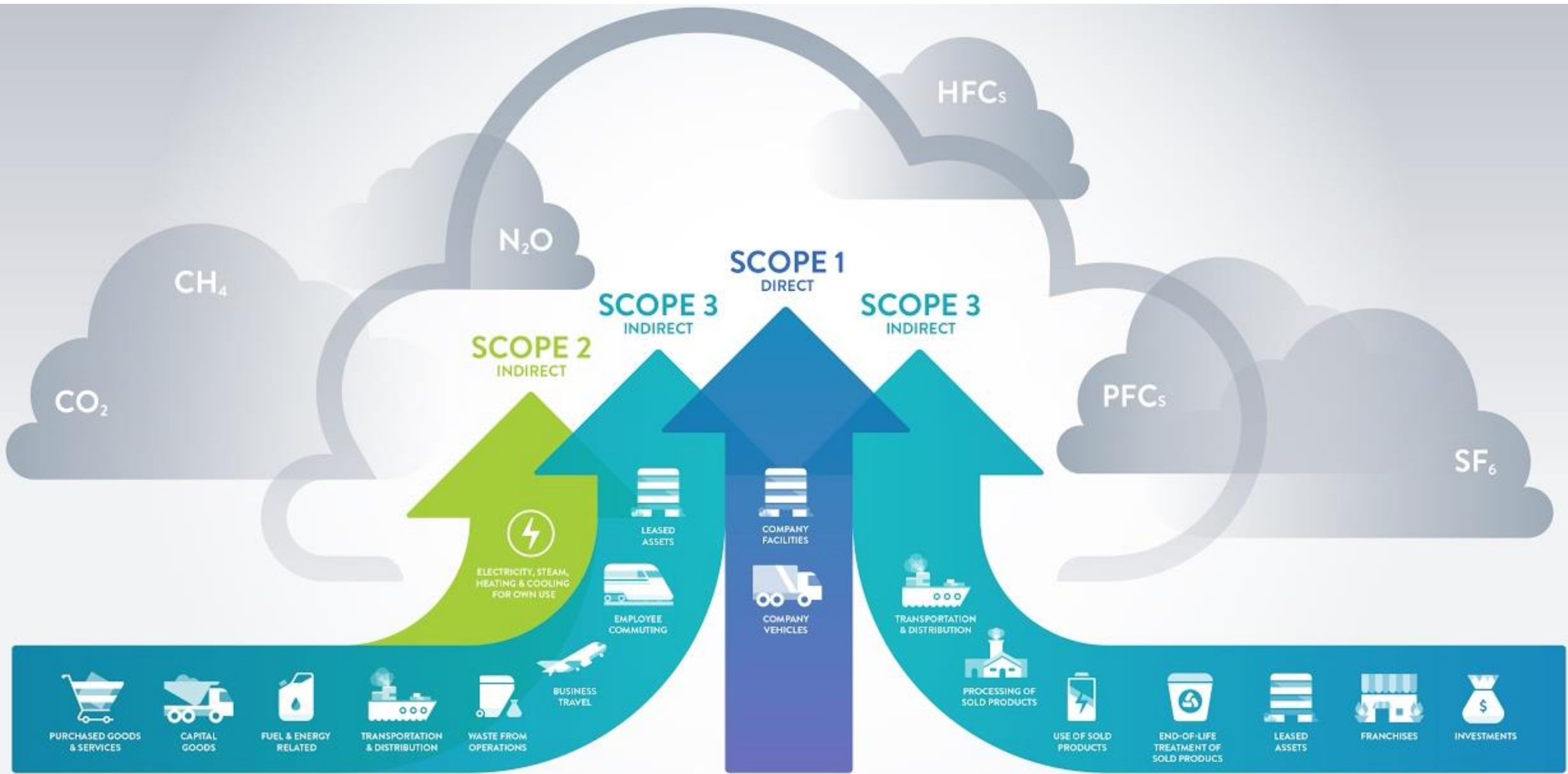
Scope 3 reporting remains a challenge for many companies...

- The **demand** for Scope 3 GHG inventory data has **increased**, but
- The **support** for Scope 3 GHG accounting has remained **static**.



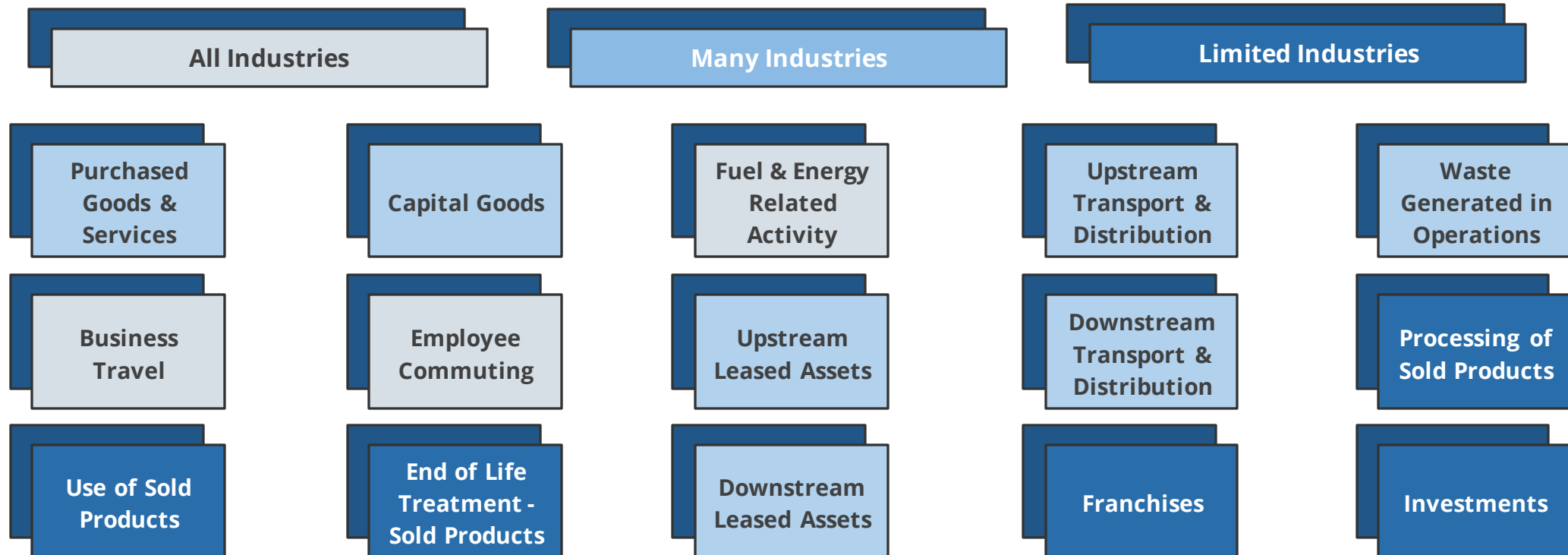
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# Scoping out my Scope 3s

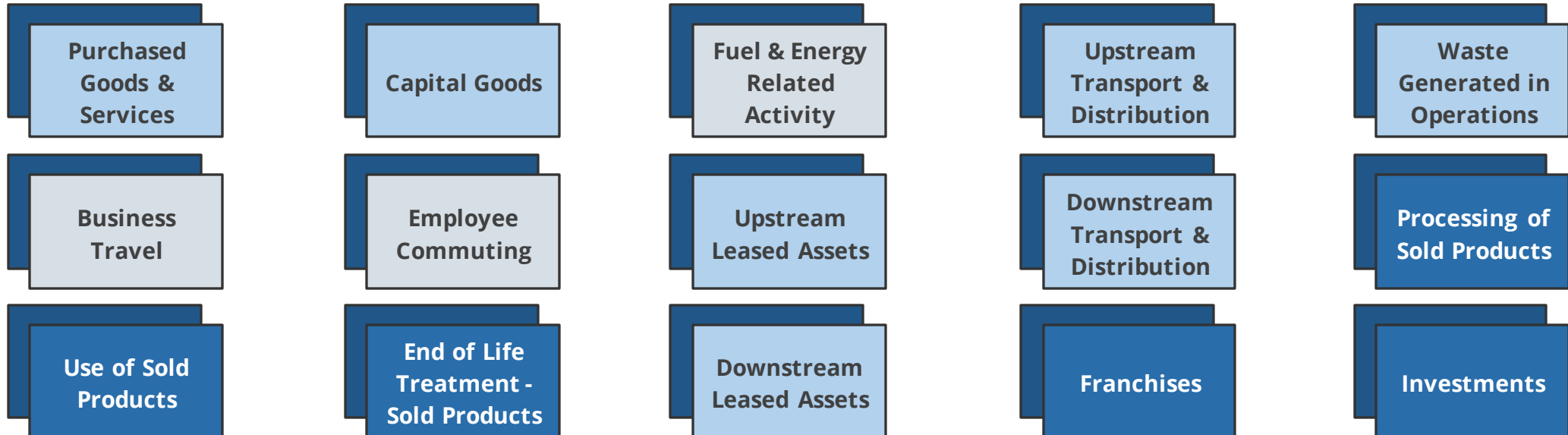
While there are many (15) Scope 3 categories, it's important to remember that reporting on all of them is not a requirement under the Scope 3 standard.



# Scoping out my Scope 3s

While there are many (15) Scope 3 categories, it's important to remember that reporting on all of them is not a requirement under the Scope 3 standard.

We need to define what is **Relevant** and what is **Material**. → How?



# Scoping out my Scope 3s

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## Relevance:

- If a Scope 3 category is completely irrelevant to a business' activities, then no inclusion is necessary.
- If a Scope 3 category is relevant, but expected to be immaterial, it is optional.

## Materiality:

- If a Scope 3 category is estimated to generate emissions in excess of a materiality threshold, it should be included.
- If a Scope 3 category is immaterial, albeit relevant, it is optional.

# Scoping out my Scope 3s

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## Materiality:

- If a Scope 3 category is estimated to generate emissions in excess of a materiality threshold, it should be included.
- If a Scope 3 category is immaterial, albeit relevant, it is optional.

**How do we define and establish materiality?**



# Defining Materiality

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A materiality threshold for Scope 3 inclusion is not set by the **GHG Protocol**, nor is one set by the majority of GHG reporting frameworks or programs.

The onus falls to a reporting entity-led screening exercise, which should be documented.

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The 'Scope 3 Evaluator Tool' is an intentionally high-level tool to identify which categories are relevant/material. The results from the tool are generally inaccurate.

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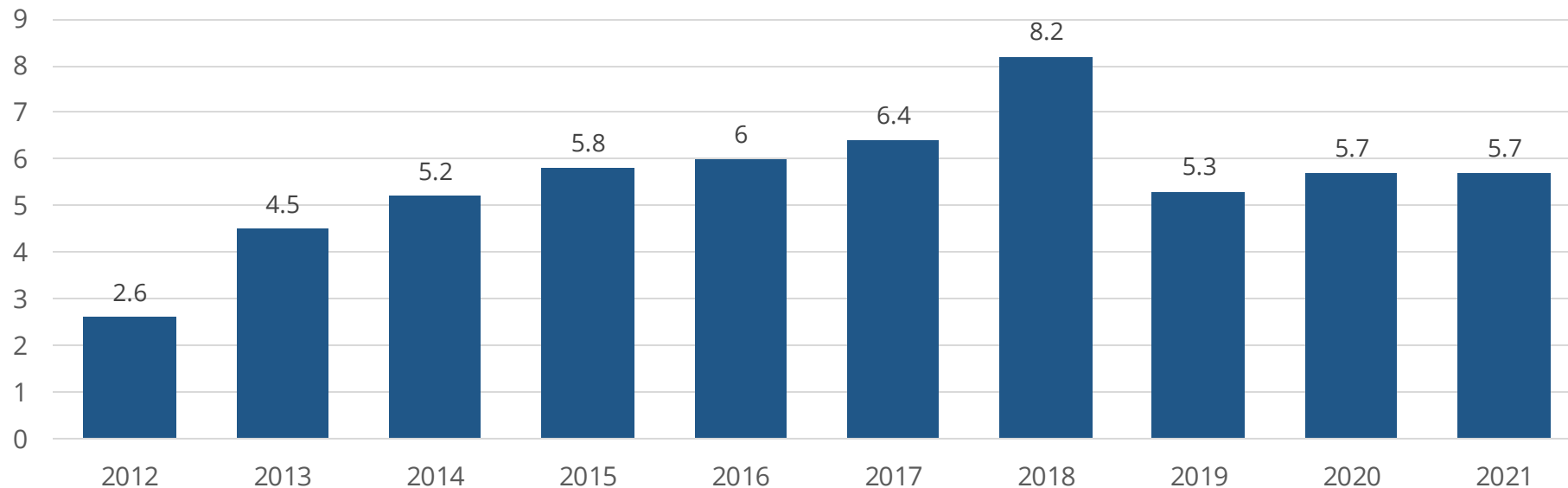
## Third-Party Support

Streamlined GHG Quantification estimates, based on readily available data, interviews, or other anecdotal information, can help determine relevance and materiality.

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# How Many is Enough?

The number of Scope 3 categories reported (through CDP) has leveled over time.



**Number of Scope 3 categories reported on by companies reporting Scope 3 data**

*Data from CDP, Research conducted by Concordia University*

# Scope 3s Generally Improve over Time

In **very few instances** will a first-year Scope 3 GHG Inventory satisfy the wish list of an ESG team or third-party verifier.

## Purchased Goods & Services

Industry average emission factors for products



Supplier specific emission factors for products

## Waste Generated in Operations

Waste amounts estimated based on compactor size



Data supported by a third-party waste audit

## Business Travel

Travel data only for staff at HQ



Central process to collect travel data for all staff



# Scope 3 Calculation Examples

# Scope 3 Calculation Example

## Category 3 – Business Travel

Reporting Entity Data Requirements	Emission Factor Requirements
<p><b>Full year travel manifest (origin, destination, mode) for all travel modes included in the category.</b></p> <p><b>Data Sources:</b></p> <ul style="list-style-type: none"> <li>• Travel agency</li> <li>• Financial records</li> <li>• Consultant provided tracking tools</li> </ul>	<p><b>Air Travel:</b></p> <ul style="list-style-type: none"> <li>• United Kingdom Department of Env. Food, and Rural Affairs (DEFRA) emission factors (gCO<sub>2</sub>e/p-km).</li> </ul> <p><b>Ground Travel:</b></p> <ul style="list-style-type: none"> <li>• Vehicle specific or vehicle size generalizations (small, mid-size, large, etc.) from the United States Env. Protection Agency (gCO<sub>2</sub>e/v-km)</li> <li>• Vehicle specific fuel economy specifics (if known)</li> </ul>

# Scope 3 Calculation Example

## Category 11 – Use of Sold Products

Reporting Entity Data Requirements	Emission Factor Requirements
<p><b>Primary energy demand (kW), operating hours per year, and geographic sales records for products sold and used in the reporting period.</b></p> <p><b>Data Sources:</b></p> <ul style="list-style-type: none"> <li>• Product spec sheets (watts, volts, amps)</li> <li>• E-commerce sales reports (postal codes)</li> </ul>	<p><b>Stationary / Mobile Fuels:</b></p> <ul style="list-style-type: none"> <li>• Regionally appropriate fuel specific emission factors</li> </ul> <p><b>Electricity:</b></p> <ul style="list-style-type: none"> <li>• Regionally appropriate grid electricity emission factors (National Inventory Reports, United States E-Grid Database, etc.)</li> </ul>

# Scope 3 Calculation Example

## Category 1 & 2 – Purchased Goods & Services / Capital Goods

Reporting Entity Data Requirements	Emission Factor Requirements
<p><b>Purchasing Amounts (# of units, dollars) during the reporting period</b></p> <p><b>Data Sources:</b></p> <ul style="list-style-type: none"> <li>Procurement &amp; Financial Records</li> </ul>	<ul style="list-style-type: none"> <li><b>Supplier-specific</b> emission factors will already be established from participating suppliers.</li> <li><b>Industry average</b> emission factors for relevant purchased products (life cycle databases, etc.) on a per unit or per dollar of expense basis.</li> </ul>





# Supplier Engagement Deep Dive

## Purchased Goods & Services

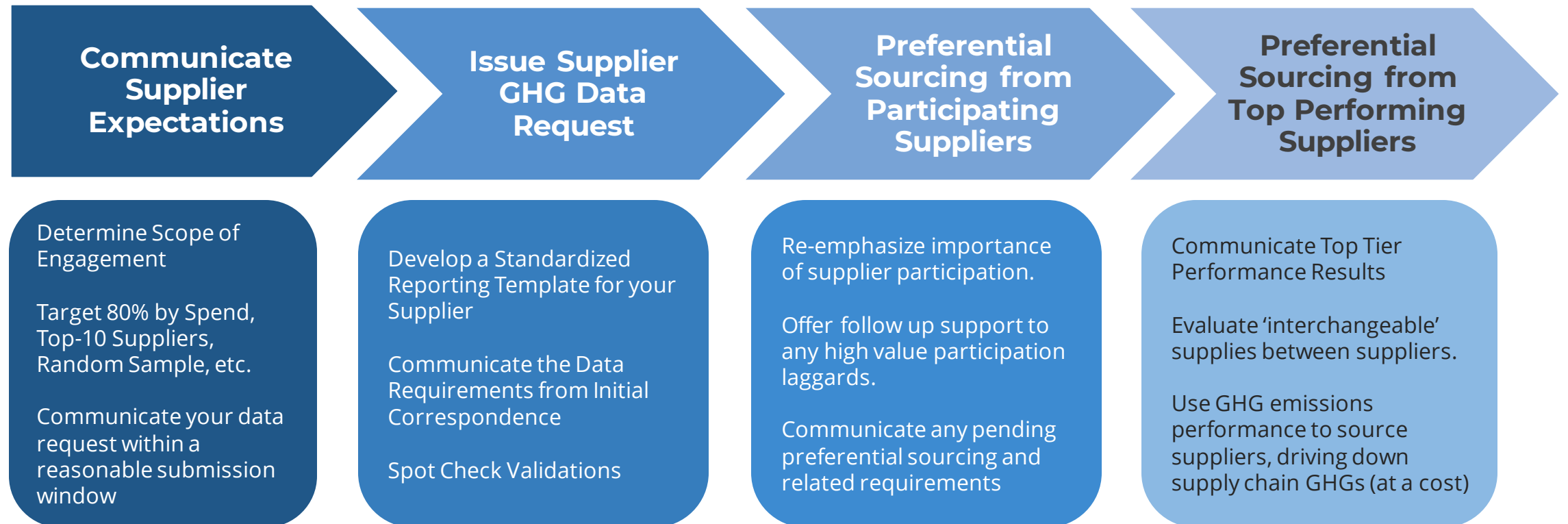
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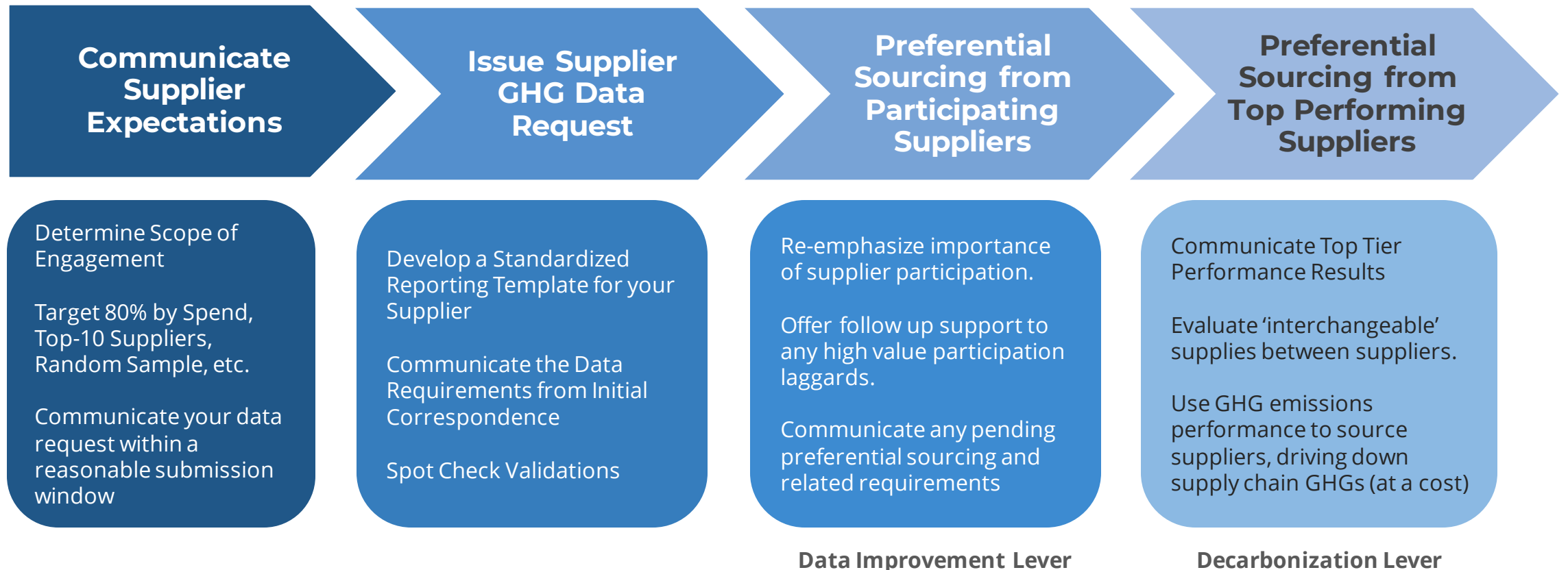




# Supplier Engagement Milestones



# Supplier Engagement Milestones



# Don't Lose Sight of the Intent

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For most companies, the intent of reporting Scope 3 supply chain (Purchased & Capital Goods) GHG emissions is to...

- Make progress towards preferentially sourcing low carbon products
- De-risk supply chains away from high carbon intensity processes and environments

High quality supply chain (supplier specific product / service data, allocated Scope 1 + 2 data) is instrumental to the task, but it often takes multiple years to acquire.



# Closing Thoughts & Next Steps

# Takeaway Checklist

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Refresh your understanding on Scope 3 Requirements & Best Practices



Complete a Screening Exercise (GHG Protocol Scope 3 Evaluator, Third-Party)  
Review Peer / Competitor Scope 3 Disclosures



Finalize your Material Scope 3 Boundary (result of Screening)



Explore what data you already have and align with Scope 3 Technical Calculation Guidance



Compile Relevant Emission Factors, or begin a Supplier Engagement Process



Perform Scope 3 Calculations, Validate your Screening Exercise, Focus on Data Improvement

# Takeaway Resources

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## Emission Factor Resources:

- **World Resources Institute** – Cross Sector Tools Emission Factors (upstream & downstream distribution)
- Department of Food, Environment, and Rural Affairs (**DEFRA**) UK (air travel)
- **United States Environmental Protection Agency** – Emission Factors Hub (distribution, car travel)
- **National Inventory Reports** – UNFCCC (electricity, natural gas)

## Calculation Guidance:

- **GHG Protocol – Technical Guidance** for Calculating Scope 3 Emissions
  - Category-specific chapter snippets are available
  - Data and emission factor requirements, with examples

# Contact and Q&A

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Thank you for your time and attention!

[Liam.Conway@carbonzero.ca](mailto:Liam.Conway@carbonzero.ca)

[www.carbonzero.ca](http://www.carbonzero.ca)

1-416-640-8900



# Q&A







## Partners in Project Green

A Program of Toronto and Region Conservation Authority



# Thank You!