

# Introduction to Scope 3 Accounting

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According to the GHG Protocol



# Instructor Introduction

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Senior Program Officer, GHGMI

- Education in Anthropology, Sustainable Development
- Over 5 years of experience in organizational GHG accounting
- Teaching assistant for our online course *201 Basics of Organizational GHG Accounting*



# Our previous webinar:

What is GHG accounting?

How to account for GHGs?

Organizational & Operational Boundaries

Scope 1

Scope 2

# Session Outline



What are Scope 3 Emissions and why are they important?



Risks and Opportunities



Methodologies

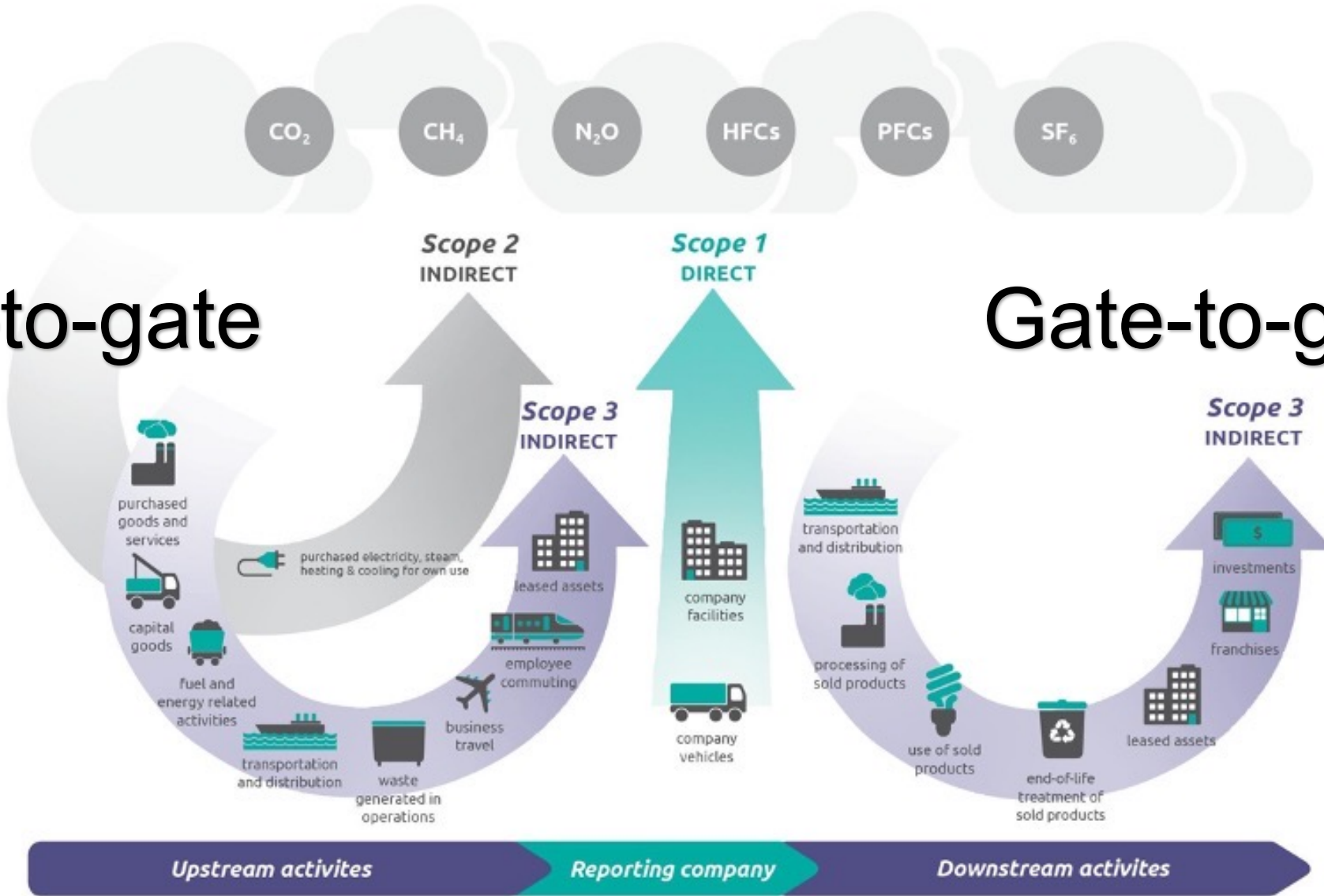


Scope 3 Categories

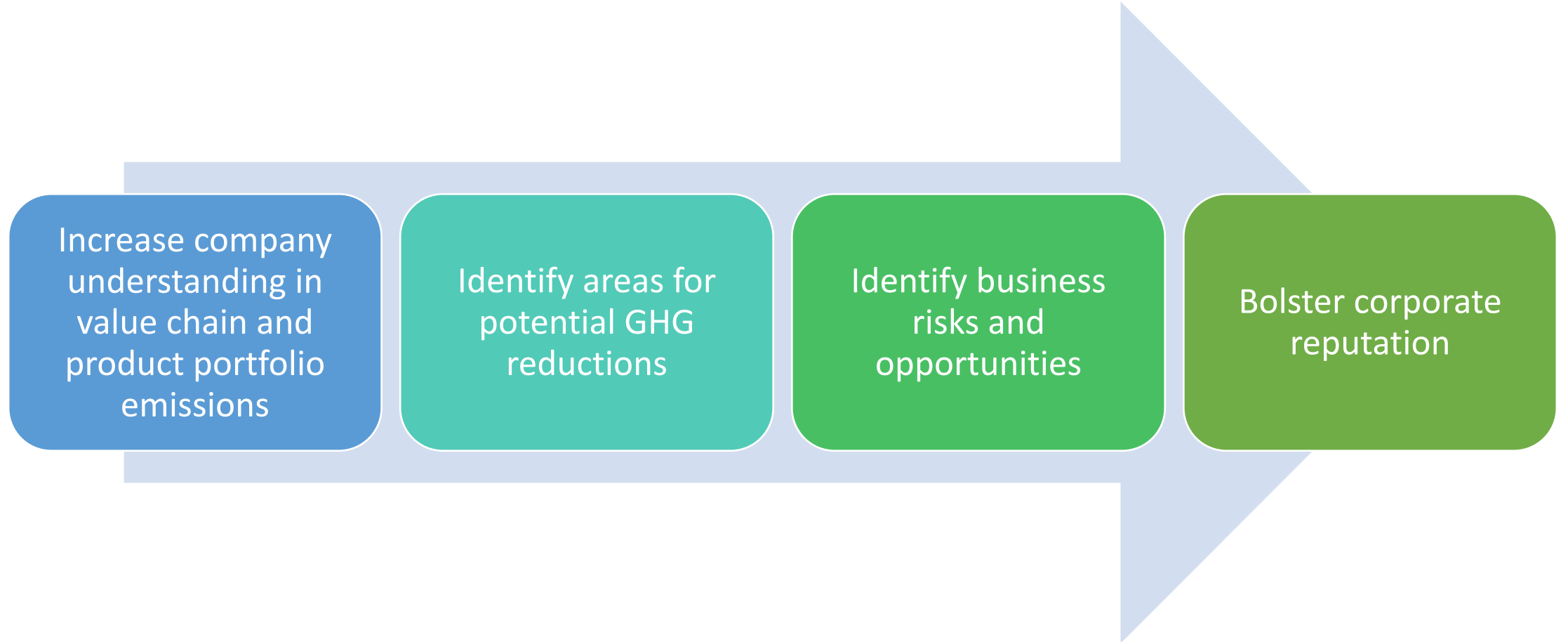
Figure [1.1] Overview of GHG Protocol scopes and emissions across the value chain

Cradle-to-gate

Gate-to-grave



# A Scope 3 inventory can...



# A Scope 3 inventory cannot...

Address avoided emissions

Support the accounting of GHG emission offsets or claims of carbon neutrality

Be used as a performance metric against other corporate inventories

# Session Outline



What are Scope 3 Emissions and why are they important?



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Scope 3 Categories

# Risks associated with Scope 3 emissions

## Regulatory

Regulations could apply in areas in which the reporting company, its suppliers, or its consumers, operate

## Supply chain costs and reliability

Suppliers could pass higher energy or emissions-related costs to customers

## Product and technology

Decrease in demand for products with higher emissions, which could increase competition

## Litigation

Law-suits related to GHG emissions directed at the reporting company or supplier within the value chain

## Reputation

Increasing demand for companies to increase transparency around their value chain emissions

# Opportunities associated with Scope 3 emissions

## Efficiency and cost savings

GHG reductions and cost savings often go together

## Drive innovation

Insights into your scope 3 emissions can provide incentives for innovation in supply chain management and product design

## Increase sales and customer loyalty

Increasing value placed in low-emissions products

## Improve stakeholder relations

Proactive disclosure of emissions can increase trust and improve relationships for stakeholders

## Company differentiation

In an increasingly environmentally-conscious marketplace, having a scope 3 inventory can help your company stand out

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What are Scope 3 Emissions and why are they important?



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Scope 3 Categories

# Accounting principles



Relevance



Completeness



Consistency



Transparency



Accuracy

# Gases required by the GHG Protocol

CO<sub>2</sub>

CH<sub>4</sub>

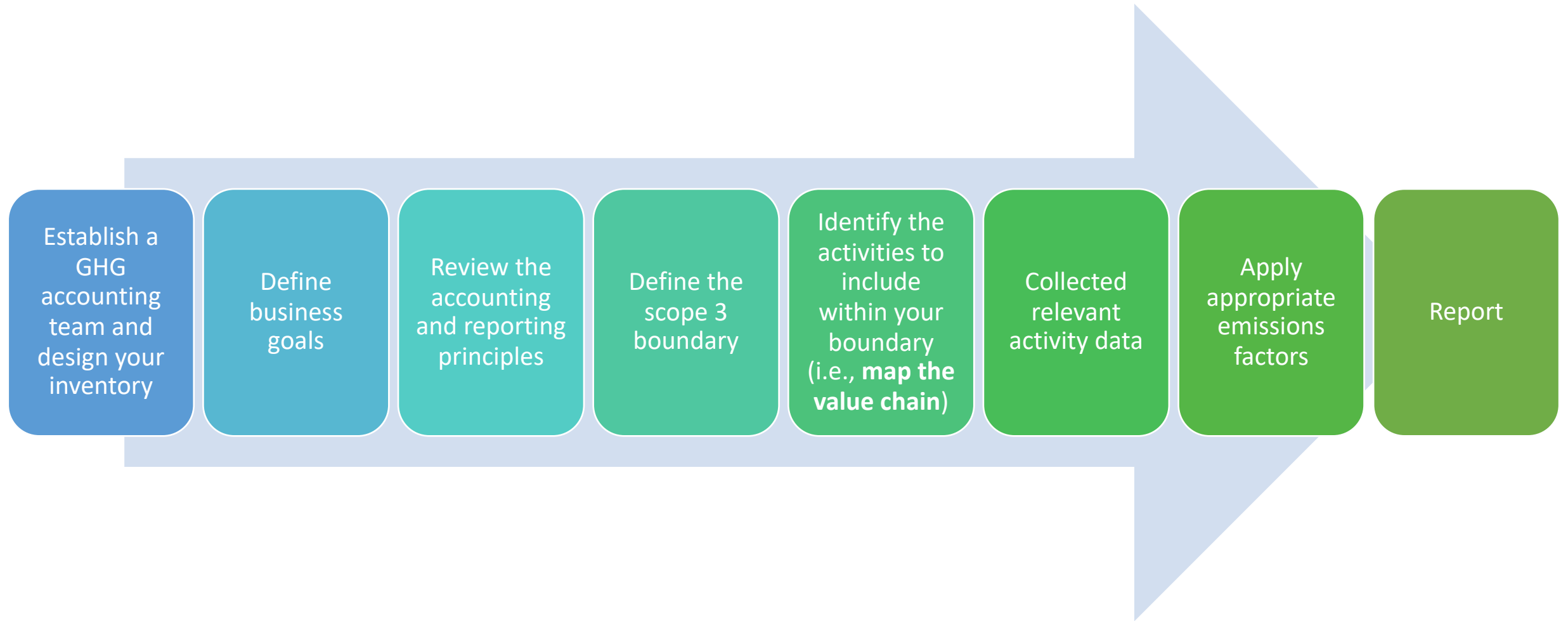
N<sub>2</sub>O

HFCs

SF<sub>6</sub>

PFCs

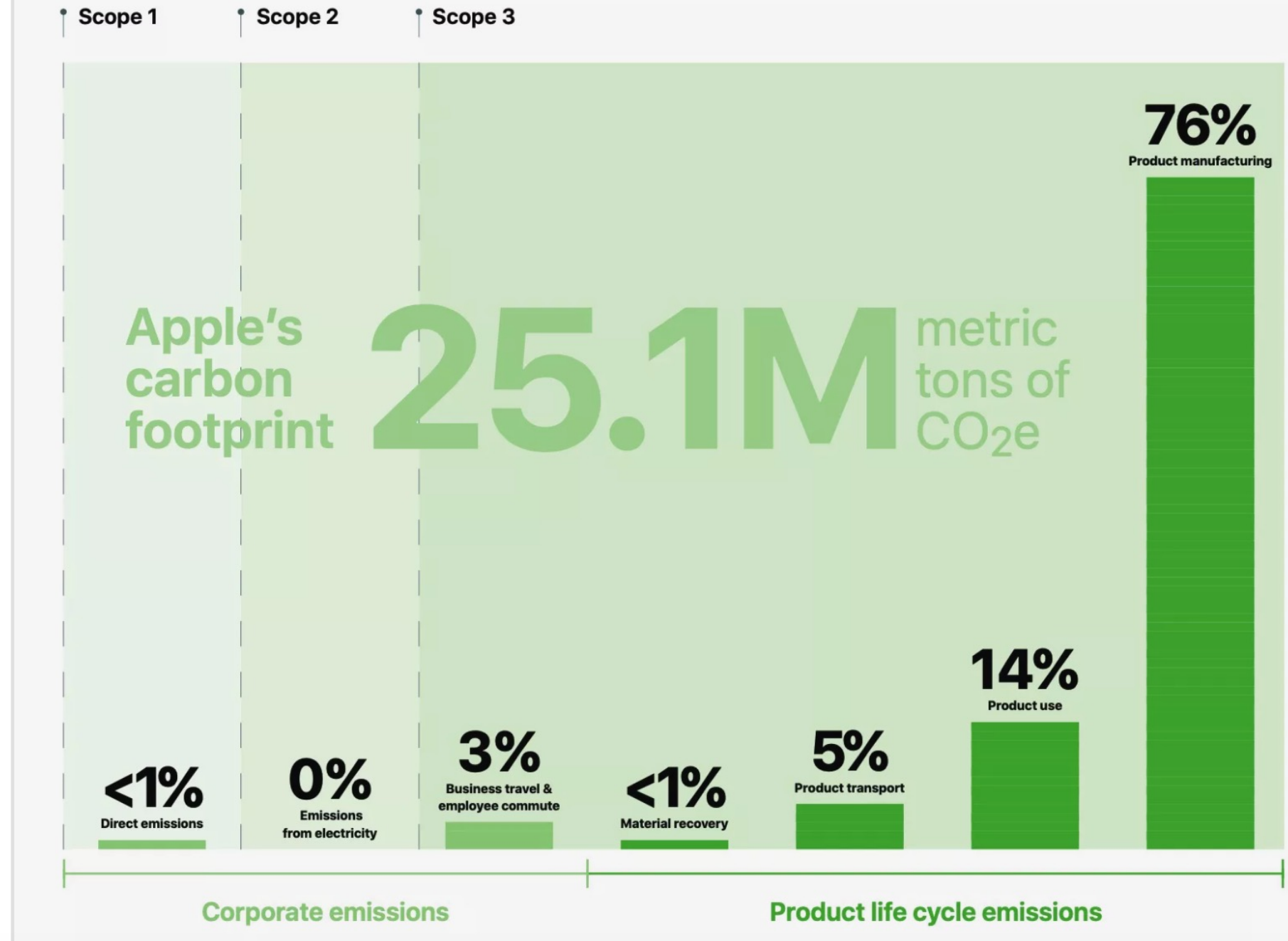
# Steps for Scope 3 accounting and reporting



# Mapping your value chain

- Use your consolidation approach (**Equity** or **Control**) to define your inventory boundary
- Create a list of activities within the company's value chain (purchased goods/services, sold goods/services, list of suppliers and partners)
- Can use a specific date to map your value chain and apply to entire year

After compiling their 2019 emissions inventory, Apple can identify areas for targeted emission reduction in their upstream supply chain.

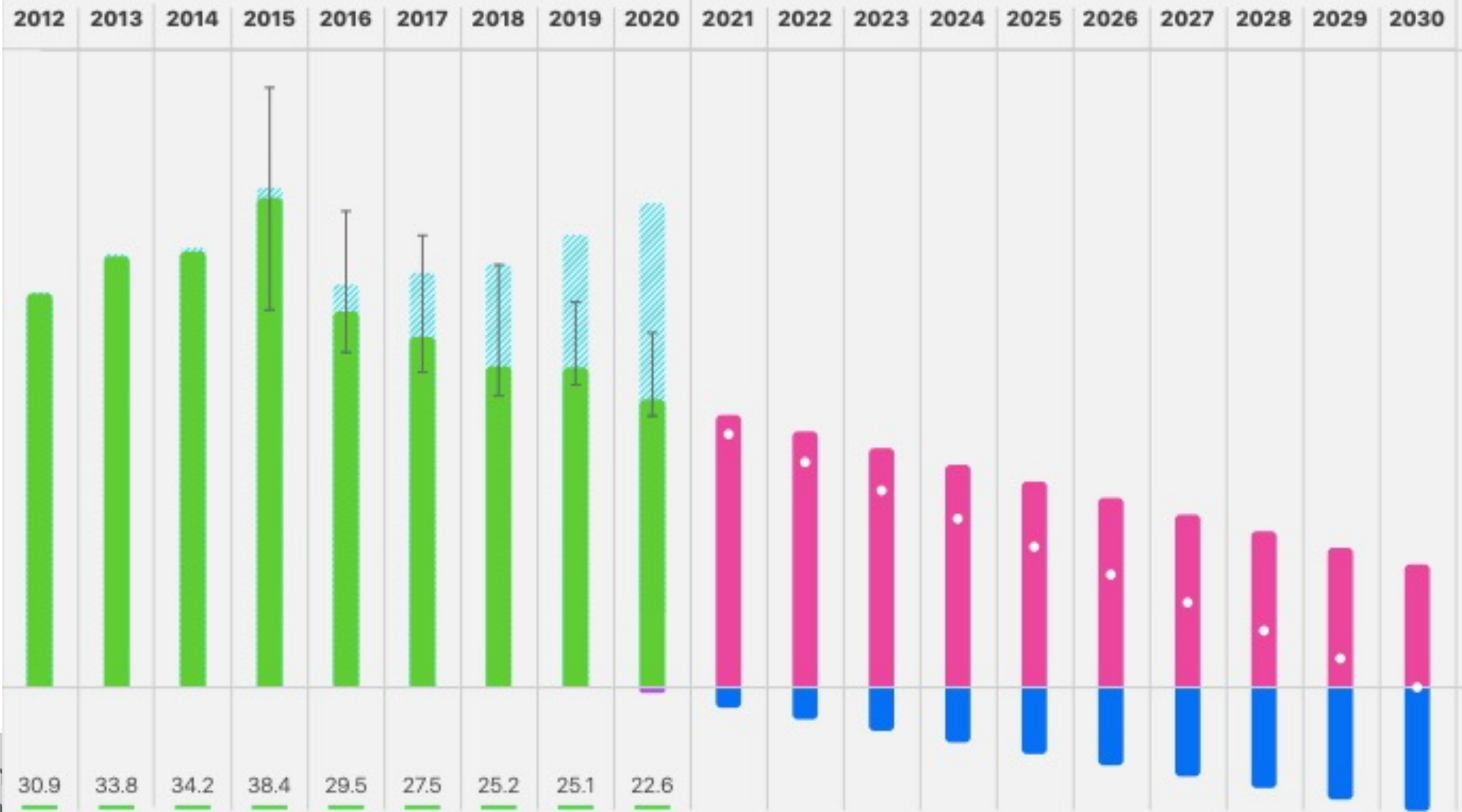


### Historical emissions

- Emissions with reductions
- ▨ Avoided emissions
- Emissions offset
- | Emissions range

### Projected future emissions

- Projected emissions
- Projected carbon removal
- Net difference between projected carbon emissions and projected removals



# Session Outline



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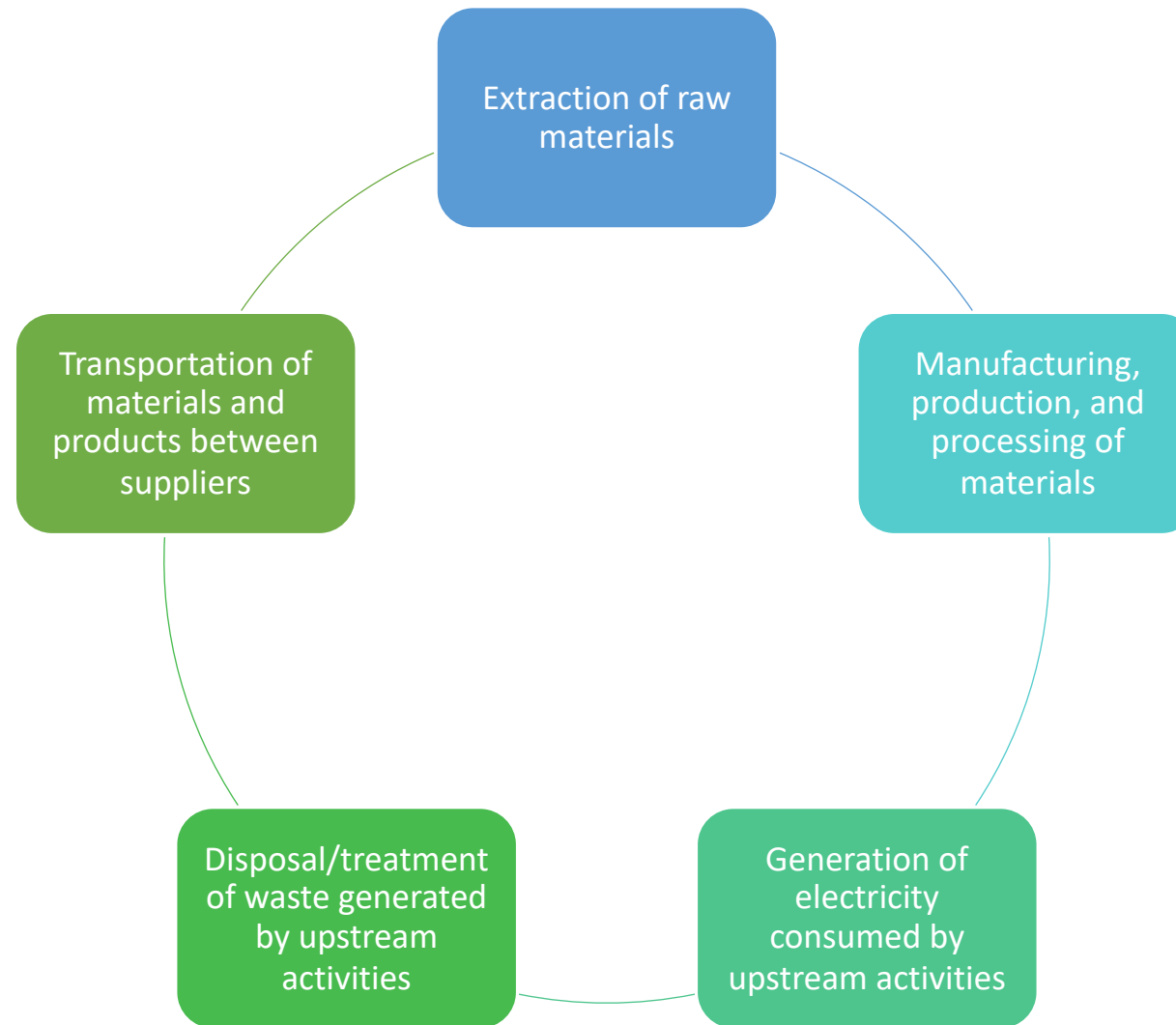


Methodologies

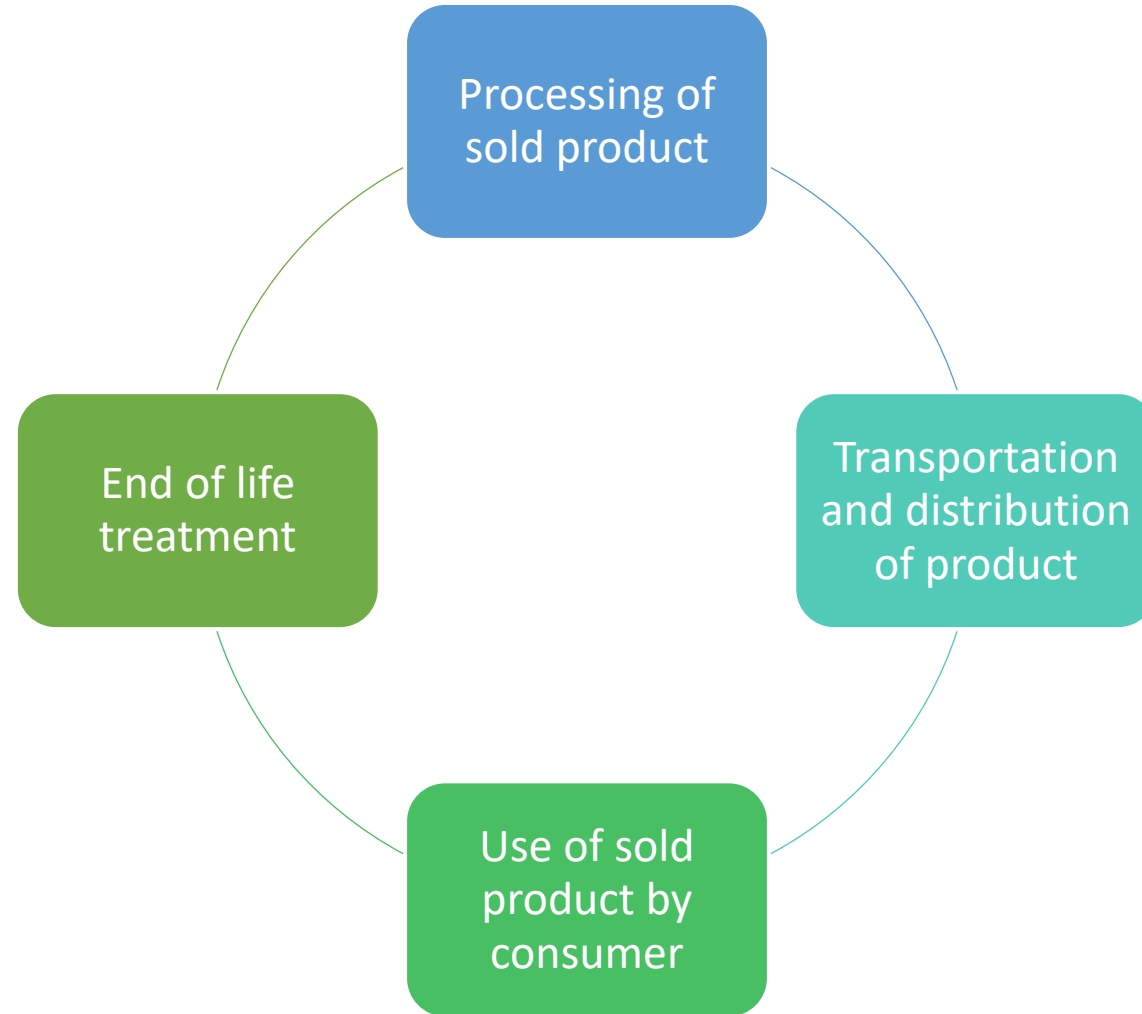


Scope 3 Categories

# Cradle-to-gate emissions (upstream)



# Gate-to-grave emissions (downstream)



# 15 categories of Scope 3

## Upstream

1. Purchased goods and services
2. Capital goods
3. Fuel and energy related activities
4. Transportation and distribution
5. Waste generated in operations
6. Business travel
7. Employee commuting
8. Leased assets

## Downstream

9. Transportation and distribution
10. Processing of sold products
11. Use of sold products
12. End of life treatment
13. Leased assets
14. Franchises
15. Investments

# 1. Purchased goods and services

- **Intermediate products:** goods that require further transformation or inclusion in another product before use by end consumer
- **Final products:** goods consumed by the end-user in their current form without further processing or transformation



## 2. Capital goods

- Final products that have an extended life, are not immediately consumed or further processed by the reporting company, and are used in their current form by the reporting company to **manufacture a product, provide a service, sell, store, or deliver merchandise.**
- There's often some ambiguity between Categories 1 and 2. The difference depends on the circumstance. In any case, companies shall not double-count emissions by attributing the same emissions to both categories.

## 3. Fuel and energy related activities

- Emissions that are related to the production of fuels and energy purchased by the reporting company within the reporting year that aren't included in Scopes 1 or 2.
- Activities include **T&D losses, upstream emissions of purchased fuels and electricity, and generation of purchased electricity that is sold to end users.**



## 4. Transportation and distribution



- **Transportation and distribution of products purchased by the reporting company within the reporting year.**

## 5. Waste generated in operations

- Emissions from **third-party disposal and treatment of waste** that is generated within the reporting year by the reporting company
- Difference between upstream waste and downstream waste



## 6. Business travel



- Emissions **from transportation of employees for business-related activities** in vehicles **not owned** by the company
- Emissions from leased vehicles are included in Category 8 (leased assets), and emissions from employee commuting are included in Category 7 (employee commute)

## 7. Employee commuting

- Emissions **from employees travelling to and from work**, in vehicles **not owned** by the reporting company
- Emissions also included in this category are from employees working remotely/teleworking



## 8. Upstream leased assets



- Emissions from **leased activities not included in the lessee's scope 1 or 2 emissions.**
- A leased asset is defined as the right to use an asset through a contract with the owner of the asset

**Scenario #1:** Company R is a toy manufacturer compiling an emissions inventory. Company R purchases motors from Company T to be used in their manufacturing equipment. In accounting the upstream emissions from the production of these motors, in which *category do the associated emissions belong?*

- A. Capital goods 
- B. Upstream leased assets
- C. Purchased goods and services
- D. Transportation and distribution
- E. Fuel and energy related activities

**Scenario #2:** Company X is using the operational control consolidation approach to compile their inventory. Company X has several employees that travel around the U.S. for work. The company leases vehicles from Company Y for these employees to use for work travel.

*In which category do the associated emissions belong?*

- A. Business travel
- B. Upstream transportation and distribution
- C. Employee commuting
- D. Upstream leased assets ✓
- E. These emissions are scope 1

**Scenario #3:** Company B is a virtual organization that does not own any buildings or facilities. They are using the operational control consolidation approach. All their employees work remotely. The company wants to account emissions associated with home-office use.

*In which category do the associated emissions belong?*

- A. These emissions are scope 1
- B. Employee commuting 
- C. Fuel and energy related activities
- D. Capital goods
- E. This activity does not produce emissions

## 9. Transportation and distribution

- Emissions from **transportation and distribution of a sold product from the reporting company to the end user, including retail and storage**



# 10. Processing of sold products



- Emissions from the **processing of intermediate products that are sold** in the reporting year by downstream companies (usually manufacturers)

# 11. Use of sold products

- Emissions from **the use of goods and services by the end-users**, sold by the reporting company within the reporting year
- ***Direct*** vs. ***indirect*** use phase emissions



## 12. End-of-life treatment of sold products



- **Waste disposal and treatment of products sold by the reporting company within the reporting year**

# 13. Downstream leased assets

- Emissions **from lessees occurring during the operation of leased assets** (such as an office building that the company owns and leases to a tenant).



# 14. Franchises



- Emissions from **the operation of franchises**, not otherwise included in scopes 1 or 2.
- Only applicable to companies that own the franchise (franchisors)

# 15. Investments

- Emissions associated with the **reporting company's investments** (e.g., equity or debt investments, project finance)
- Could be considered scope 1 or 2 if using the ***equity share*** consolidation approach


**Scenario #4:** Company A is an apparel manufacturer compiling a scope 3 emissions inventory using a control consolidation approach. Right now, they are focused on their gate-to-grave emissions. They are accounting their emissions from consumer behavior with their products. Company A assumes consumers will launder their products regularly.

*In which category do the associated emissions belong?*

- A. Purchased goods and services
- B. Waste generated in operations
- C. Downstream transportation and distribution
- D. Use of sold products ✓
- E. End-of-life treatment of sold products
- F. Activity does not produce emissions

**Scenario #5:** Company Y is a financial institution using the equity share approach to compile their inventory. Company Y has 60% equity in Company B, and wants to know the carbon intensity of that investment.

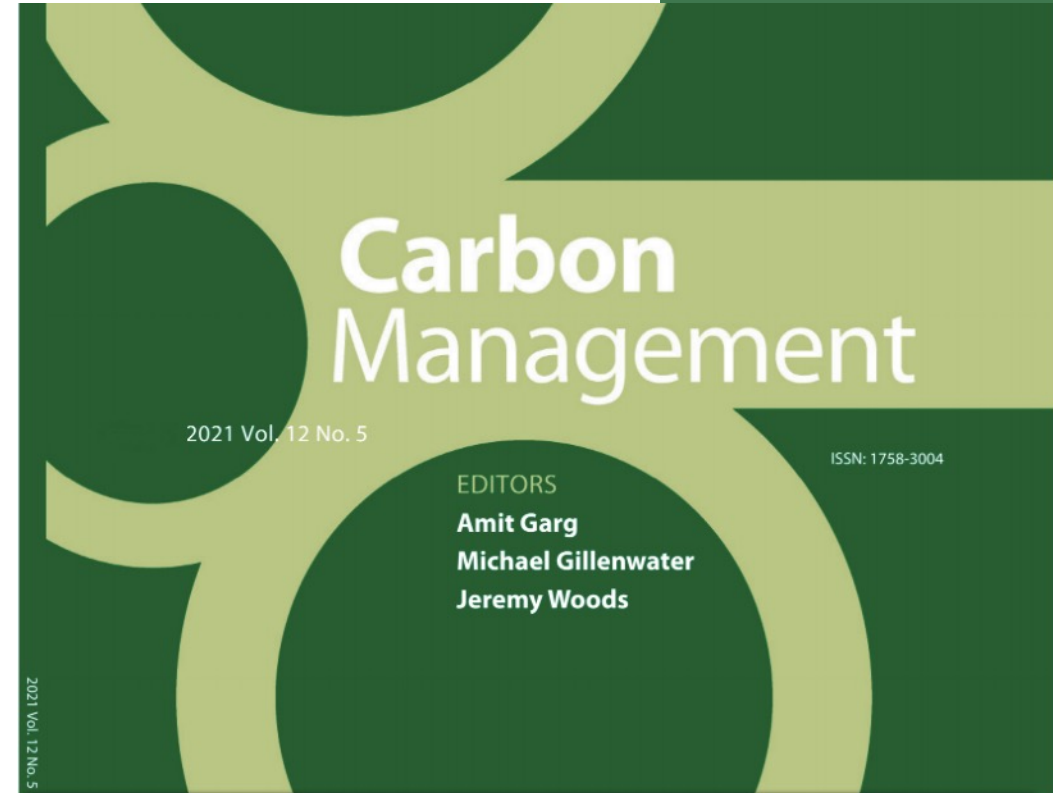
*In which category do the associated emissions belong?*

- A. Investments
- B. Franchises
- C. Activity does not produce emissions
- D. Downstream leased assets
- E. Transportation and distribution
- F. These emissions are scope 1 

# Learn more and stay in touch!

- Become a member of GHGMI, participate in our Experts Forum and gain access to the Carbon Management Journal (free):  
**[ghginstitute.org/join-us](https://ghginstitute.org/join-us)**
- Take one of our online courses:  
**[ghginstitute.org/courses](https://ghginstitute.org/courses)**
- Feel free to email with further thoughts or questions: **[Erika.Barnett@ghginstitute.org](mailto:Erika.Barnett@ghginstitute.org)**

**Thank you!**





# Q & A

What questions do you have?