



INDIA
GHG
PROGRAM

Promoting profitable, sustainable
and competitive businesses.



Strengthening/ Widening Scope 3 accounting

The Data Collection Process



Approaches to Screening

Rank activities in value chain map by:

- magnitude of GHG emissions (emissions-based screening)
- financial spend and/or revenue (financial screening)
- other criteria relevant to the company and stakeholders



Emissions-based screening

- This involves estimating emissions using activity data and reasonable assumptions, combined with secondary data
- Reasonable assumptions can be used in the absence of readily available activity data (e.g. estimating the number of business flights taken by the company)
- Types of secondary data that can be used:
 - Environmentally-extended input output (EEIO) data
 - Cradle-to-gate emission factors



Emission factors from secondary databases and **activity data** coupled with **plausible assumptions** used to estimate emissions from each category

Examples of Italcementi's screening methods:

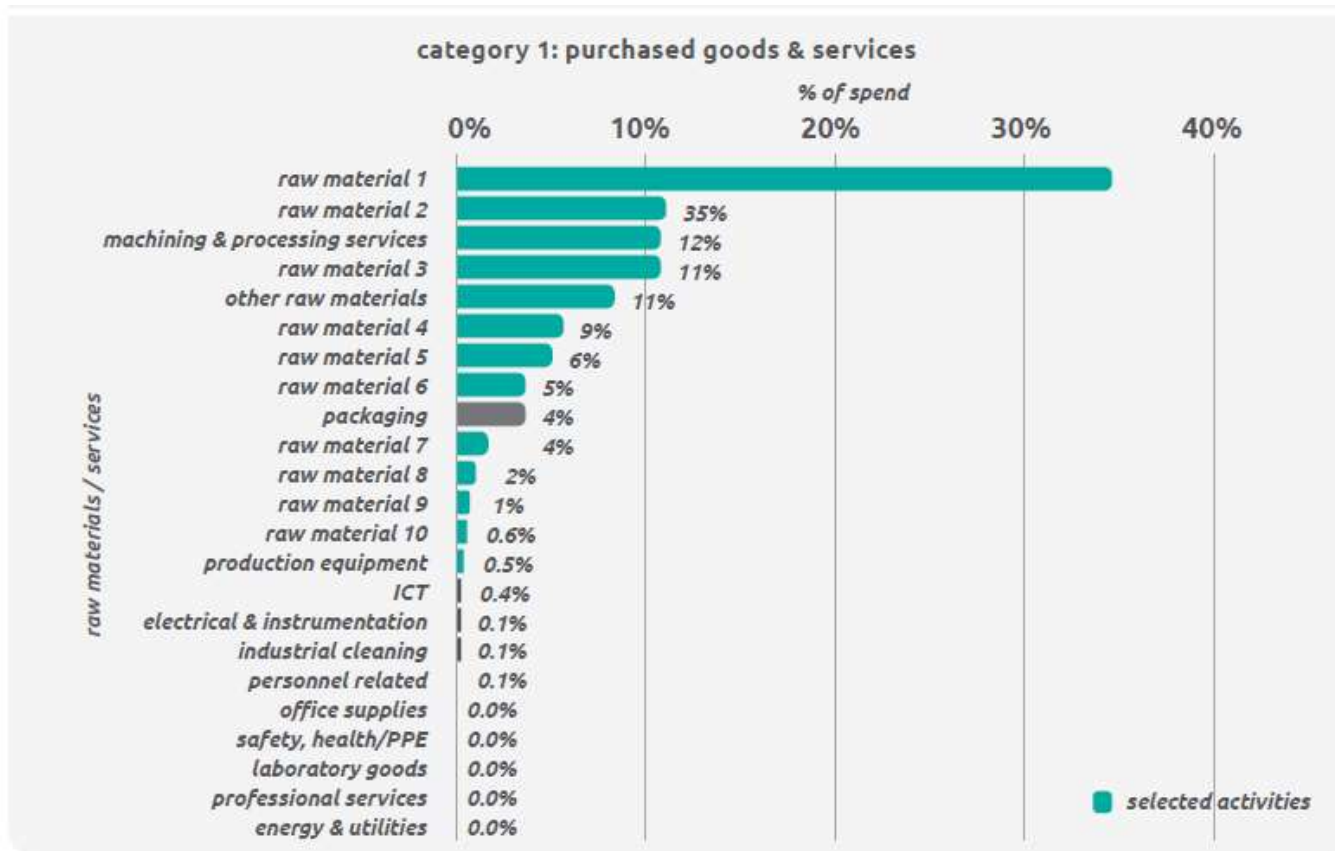
Category	Estimation method
Category 1 (Purchased goods and services)	Production volume used to estimate main inputs (limestone, clinker, aggregates, nitric acid used in laboratories). Average emission factors applied to inputs
Category 3 (Fuel- and Energy-related activities)	Total corporate entity production volume coupled with Ecoinvent electricity consumption per productivity
Category 4 (Upstream Transportation & Distribution)	Ecoinvent transportation data for cement and concrete purchased goods applied to corporate entity productivity
Category 5 (Waste generated in operations)	Ecoinvent waste generated data for cement and concrete production applied to Corporate entity productivity.
Category 6 (Business Travel)	Long haul flights each month and 100km drive each week for 50% of total number of Corporate entity employees

Screening results:

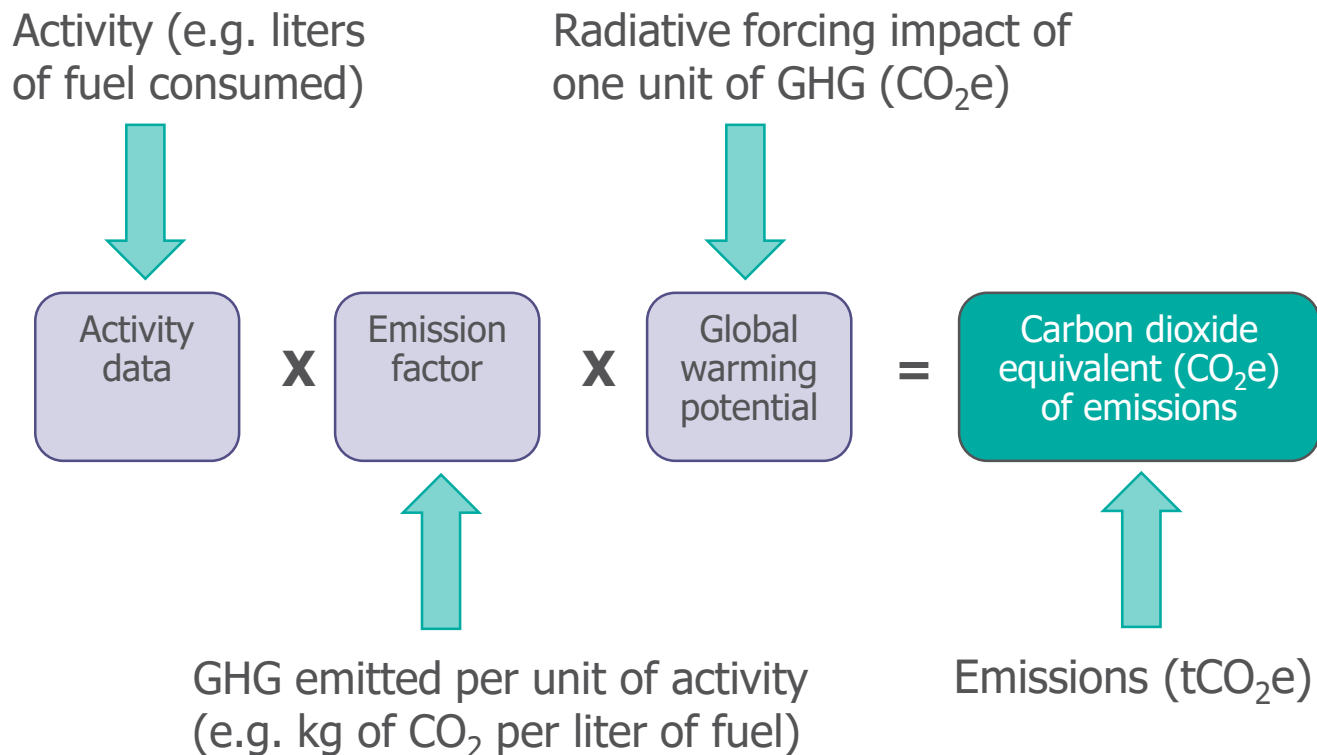
Category	Estimated Contribution to Total Scope 3
Purchased goods	70%
Fuel- and energy related emissions	14%
Transportation & distribution upstream	8%
Transportation & distribution downstream	7%
Business Travel	1%
Employee Commuting	1%
End-of-Life Treatment of Products	0%
Waste Generated in Operations	0%
Capital goods/Use of Product/Franchises/Leased assets/Investments	N/A

Case study: AkzoNobel

AkzoNobel used financial screening in order to prioritize data collection efforts within category 1, by grouping purchased goods by type and ranking the groups by expenditure



Components of an Emission Calculation



Examples of Activity Data

- Liters of fuel consumed
- Kilowatt-hours of electricity consumed
- Kilograms of material consumed
- Kilometers of distance traveled
- Hours of time operated
- Square meters of area occupied
- Kilograms of waste generated
- Kilograms of product sold
- Quantity of money spent



Examples of emission factors

- kg CO₂ emitted per liter of fuel consumed
- kg CO₂ emitted per kWh of electricity consumed
- kg PFC emitted per kg of material consumed
- t CO₂ emitted per kilometer traveled
- kg SF₆ emitted per hour of time operated
- g N₂O emitted per square meter of area
- g CH₄ emitted per kg of waste generated
- kg HFC emitted per kg of product sold
- kg CO₂ emitted per unit of currency spent



NOTE: All emission factors used to calculate scope 3 emissions should be cradle-to-gate emission factors (except for energy emission factors used for scope 3 category 3 – see next slide)

Companies may use two types of data:

- **Primary data**
 - Data from specific activities within a company's value chain (i.e., asking suppliers/customers for their emissions data)
- **Secondary data**
 - Data that is not from specific activities in a company's value chain (industry average)
 - EEIO database, financial data, proxy data

Choose data sources based on your goals for the scope 3 inventory

Note: Many companies will use a combination of primary and secondary data

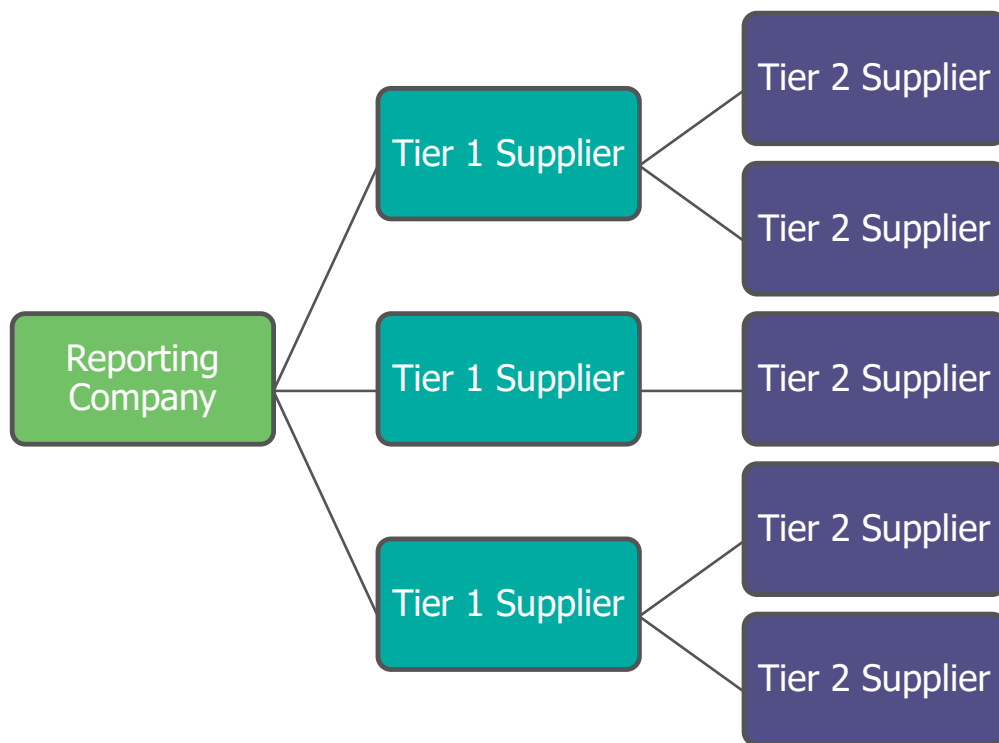
Guidance for Collecting Primary Data

Companies should collect energy or emissions data from suppliers for priority scope 3 activities

Companies should first identify relevant tier 1 suppliers

Companies are required to report the percentage of emissions calculated using supplier data

Collecting Primary Data from Tier 1 and/or Tier 2 Suppliers

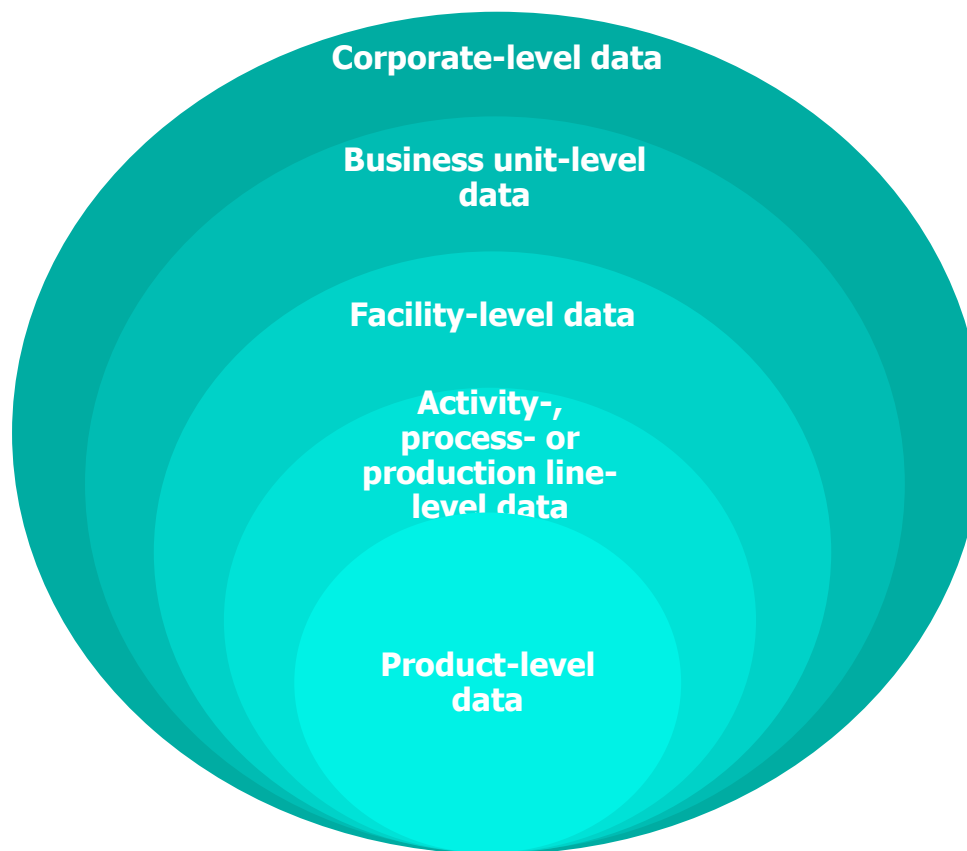


Primary Data – What should you ask suppliers for?

- **Type of data**
 - Product life cycle data
 - Scope 1 and 2 emissions data for supplier
 - Activity data
 - Estimates of upstream emissions
- **Level of data**
 - As granular and specific as possible
 - Avoids need for allocation
 - Especially important to obtain from diversified suppliers

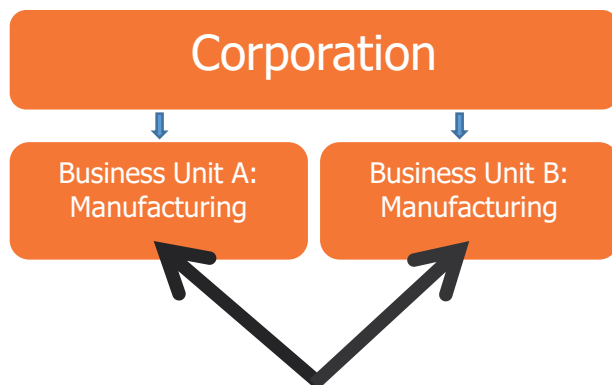


Levels of Data Specificity



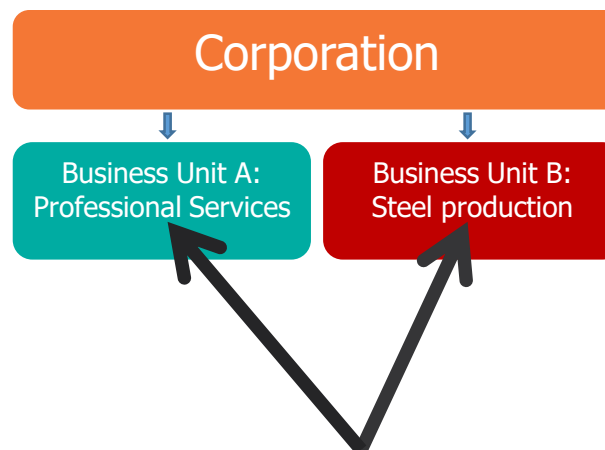
Determining Appropriate Data Type

Supplier A. Homogenous Supplier



Supplier A's business units are similar, so corporate level data might be a reasonable reflection of emissions from a product that a company purchased from this supplier

Supplier B. Diversified Supplier



Supplier B's business units have very different GHG intensities, so corporate level data would not accurately reflect emissions from a product or service that a company purchased from this supplier

Key:



Challenges of Collecting Scope 3 Data

1. **Reliance on value chain partners** to provide data
2. **Lesser degree of influence** over data collection and management
3. **Lesser degree of knowledge** about data types, data sources, and data quality
4. Broader need for **secondary data**
5. Broader need for **assumptions and modeling**

Guidance for collecting primary data

Case study: Levis

Levis designed questionnaire to collect readily available data from a sample of tier 1 and 2 suppliers



1. Questionnaire was sent to a sample of tier one suppliers (cut/sew/finish) and tier two suppliers (mills)
2. Asked for details of materials and energy used in processing, and waste
3. Responses were aggregated, averaged and modeled using the SimaPro LCA modeling software



Guidance for collecting primary data

nationalgrid

Challenge: Lack of
transparency

Case Study:

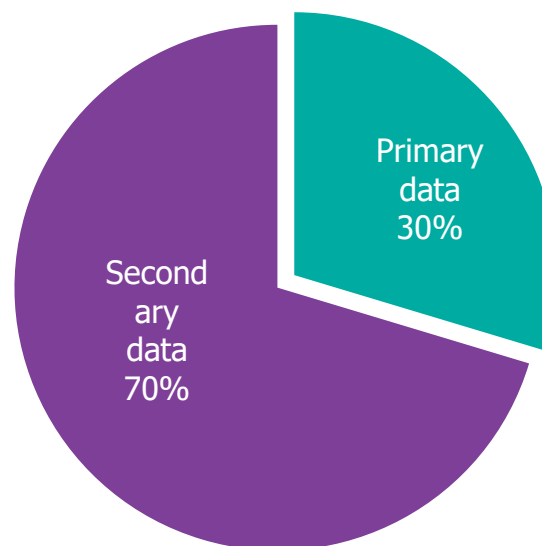
Sense check supplier data:

1. National Grid compared supplier provided data with supplier emissions using Defra factors
2. Where comparable, replaced Defra emission calculation with supplier provided data
3. Where there were discrepancies, National Grid investigated what the supplier had included in the data it provided



Using a combination of calculation methods

- Road test companies used a mixture of primary and secondary data
- On average 30% of emissions was calculated using primary data, and 70% was calculated using secondary data
- The range was 94% primary data to 0% primary data





Case Study: Levis

- Levis used a mix of primary and secondary data
- Inventory was 45% primary data and 55% secondary data

Category	Data type
Raw Materials Extraction & Processing	Secondary
Tier Two Suppliers (mills)	Primary
Tier One Suppliers (cut/sew/finish)	Primary
Distribution	Primary
General Transport & Logistics	Secondary
Product Retail	Primary
Product Use	Secondary
Product Disposal	Secondary
Corporate Emissions/Travel/Employee Commuting	Primary

Method

- Used **industry average life cycle inventory data** from various public and commercial sources
- Matched emissions factors with its **own internal data on activities and purchases**

Justification

- Allowed Kraft to understand its total scope 3 emissions with **reasonable accuracy, cost, and speed**, and with the ability to update as more precise secondary data became available
- Using secondary data fit Kraft's needs given that a large portion of its purchased commodities are produced in a global market where **tracking the agricultural source of origin is challenging**

Scope 3 Inventory – An Iterative Process



India GHG Program Secretariat:

- <http://indiaghgp.org/>
- indiaghgpsecretariat@wri-india.org

Address:

- 1st Floor, WRI India, Godrej and Boyce Premises, Gasworks Lane, Lalbaug, Parel, Mumbai-400012
- Tel: +91 (22) 2471 3565

Contact:

- Chirag Gajjar – CGajjar@wri.org
- Vivek Adhia – vivek.adhia@wri-india.org

Partner contacts:

- Kiran Ananth – kiran.ananth@cii.in
- **Arupendra Nath Mullick** – amullick@teri.res.in

Social Media:

- <https://twitter.com/indiaghgp>
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