



Exploring Scope 3 Emissions

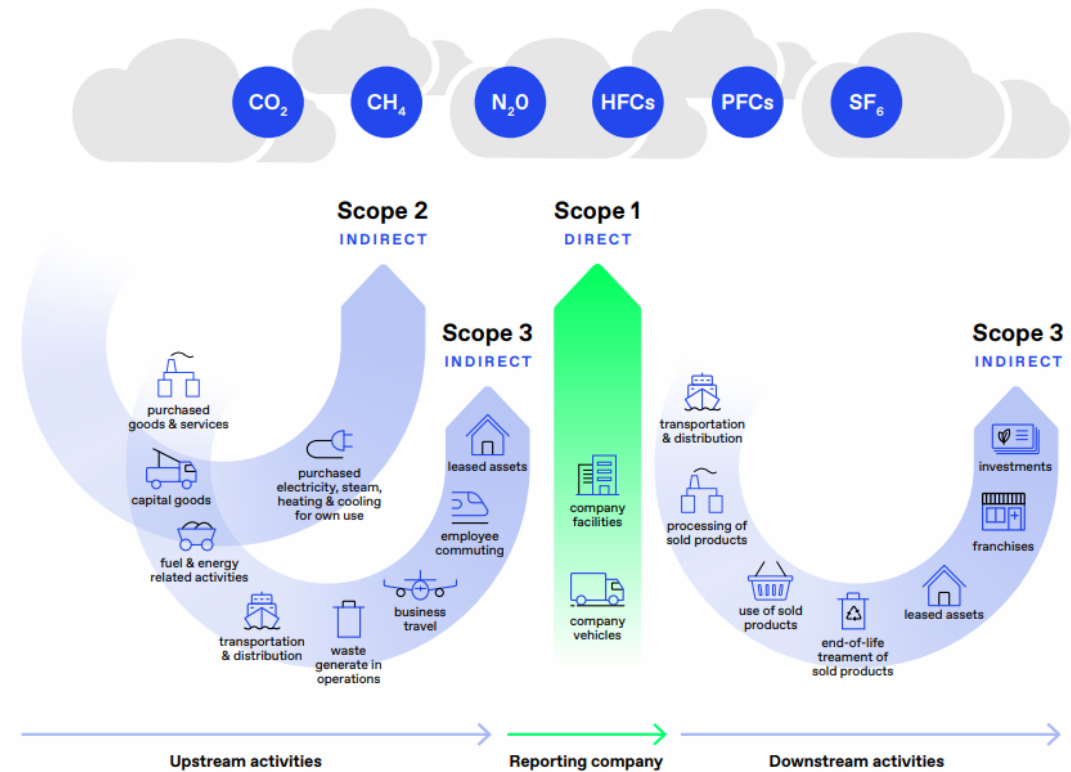
Climate Leaders Coalition Masterclass – May 2023



ON A MISSION TO REDUCE
EMISSIONS IN NEW ZEALAND

Scope 3 Emissions Definition

Scope 3 emissions are the indirect greenhouse gas emissions associated with a company's activities that occur outside of its direct operations or ownership.



Source: GHG Protocol

The Carbon Trust – An introductory guide to Scope 3 emissions

Drivers & Opportunities to Explore Scope Three

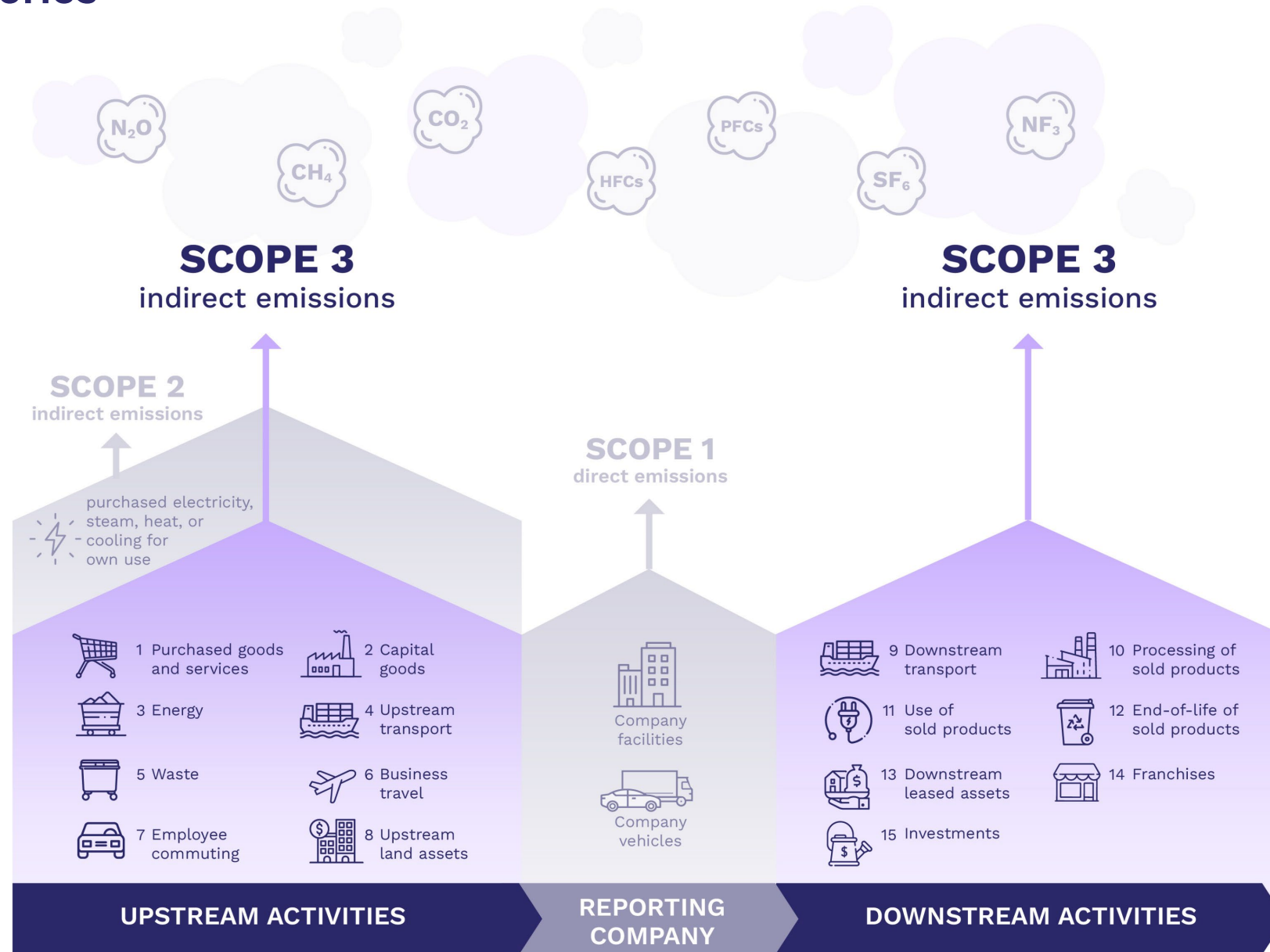
1. Comprehensive view of emissions and organizational impact
2. Regulatory landscape on reporting
3. Hold leadership position on climate action
4. Build resilience within your value chain

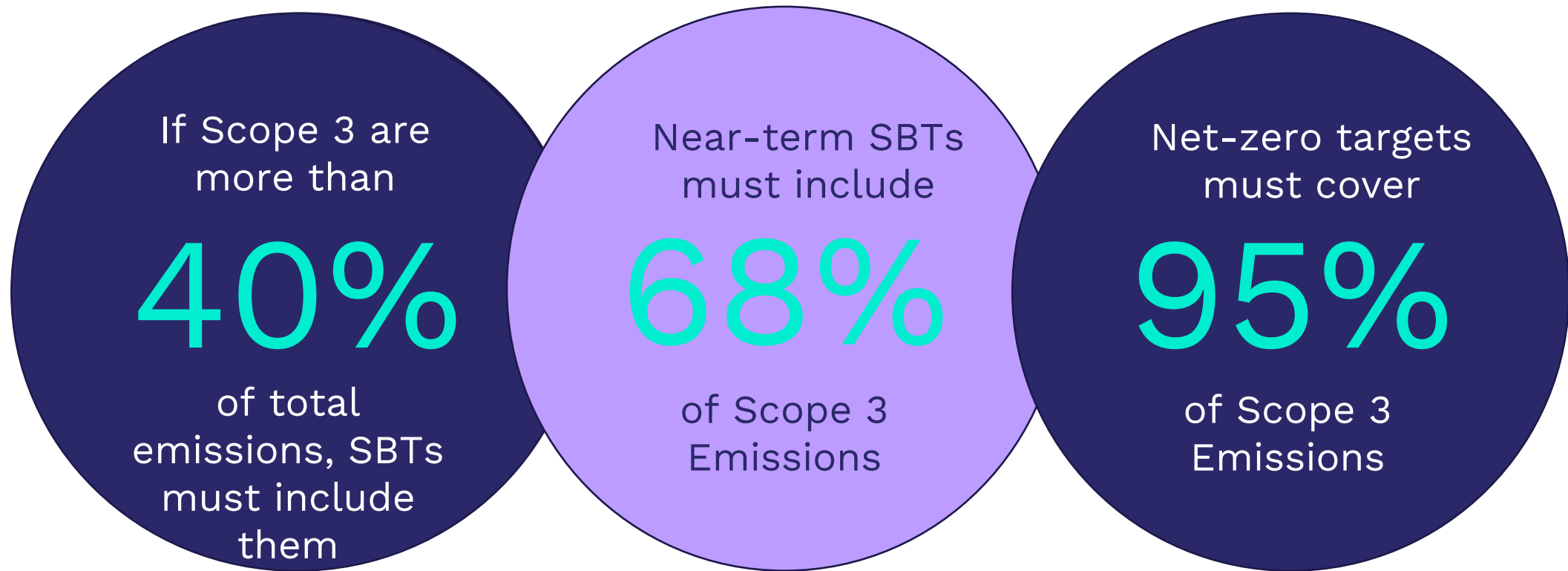
Whose hedge is it anyway?



— Why your Scope 3 emissions count

Scope 3 categories





Identify your risks

Reset your strategy

Stand out from competitors

Improve relationships with customers and suppliers

Build your brand value and reputation

— Solving the data puzzle



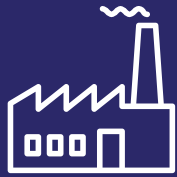
Different categories & sectors

% of total emissions	Scope 1 & 2	1. Purchased goods and services	2. Capital Goods	3. Fuel & energy	4. Upstream transport & distribution	5. Waste generated in operations	6. Business travel	7. Employee commuting	9. Downstream transport and distribution	11. Use of sold products	12. End-of-life treatment of sold products
Utilities	30%	25%	0%	20%	0%	0%	0%	0%	0%	25%	0%
Technology	25%	31%	0%	1%	1%	1%	9%	8%	1%	24%	0%
Chemicals	24%	42%	2%	1%	1%	0%	0%	0%	1%	9%	19%
Industrial Goods & Services	17%	33%	1%	2%	12%	2%	24%	5%	0%	4%	1%
Personal & Household Goods	4%	47%	1%	0%	4%	0%	0%	1%	6%	33%	4%
Construction & Materials	44%	10%	0%	5%	1%	0%	0%	0%	0%	39%	0%
Food & Beverage	11%	63%	1%	4%	6%	0%	0%	0%	9%	4%	2%
Health Care	23%	51%	4%	13%	1%	3%	3%	2%	0%	0%	0%

Scope 3: Upstream



Purchased
goods &
services



Capital
goods



Energy



Transport

Scope 1
Direct
Emissions

Scope 3: Downstream



Transport



Processing



Use of
sold goods



End-of-life

Scope 2
Electricity
Usage



Waste



Business
travel



Employee
commuting



Leased
assets



Leased
assets



Franchises



Investments

Primary and secondary data

	Primary data	Secondary data
	Data from specific activities within a company's value chain	Data that is not from specific activities within a company's value chain
Examples		
Purchased goods and services	Supplier specific emissions, such as cradle to gate emission calculation	Industry average emission factors per material consumed, or per dollar spent
Transportation	Activity data for transportation – litres of fuel consumed.	Estimated distance travelled by mode based on industry-average data
Waste	Actual volume of weight generated from waste service provider	Estimated volume of waste generated based on industry-average data Proxy data based on other operations where waste data is available.

Availability


- **Option 1: Spend based emission factors (EFs) by category**
 - precise but practical for large range
 - split by category (e.g., electronic goods, apparel etc.)
- **Option 2: Life Cycle Assessment**
 - very precise, granular assessment on an individual product
 - less practical for a large range of varied products.
- **Option 3: Carbon data from suppliers**
 - either by product (if they have completed an LCA/EPD) or total carbon footprint divided by proportion of revenue from BGP
 - less precise than LCA but more representative than generic spend-based EFs

Accuracy



Corporate Value Chain (Scope 3) Accounting and Reporting Standard

***Supplement to the GHG Protocol Corporate
Accounting and Reporting Standard***



About your organisation/operations

Has your organisation acquired any capital goods in this reporting year (e.g. equipment, machinery, buildings, facilities, vehicles)? *

☒ Yes

☐ No

☐ Not sure

[<](#) [NEXT](#)



Your results: the categories of Scope 3 emissions that are most relevant to your organisation

Click on the links below to find the information you need to start tackling your Scope 3 emissions.

These Scope 3 categories are likely to be relevant

- Category 1 - Purchased goods and services
- Category 3 - Fuel- and energy-related activities
- Category 5 - Waste generated in operations
- Category 7 - Employee commuting
- Category 8 - Upstream leased assets
- Category 15 - Investments

These Scope 3 categories may be relevant

- Category 14 - Franchises

These Scope 3 categories are unlikely to be relevant

- Category 2 - Capital goods
- Category 4 - Upstream transportation and distribution
- Category 6 - Business travel
- Category 9 - Downstream transportation and distribution
- Category 10 - Processing of sold products
- Category 11 - Use of sold products
- Category 12 - End-of-life treatment of sold products
- Category 13 - Downstream leased assets



Category 1 – Purchased goods and services



Category 2 – Capital goods



Category 3 – Energy



Category 10 – Processing of sold products



Category 11 – Use of sold products



Category 12 – End-of-life of sold products



Category 4 – Upstream transport



Category 5 – Waste



Category 6 – Business travel



Category 13 – Downstream leased assets



Category 14 – Franchises



Category 15 – Investments



Category 7 – Employee commuting



Category 8 – Upstream land assets



Category 9 – Downstream transport

Goal: Continuous Improvement

SBTi / BCG research

- Cohort of early adopters

Drivers

- Anticipation of regulation
- Increasing expectations

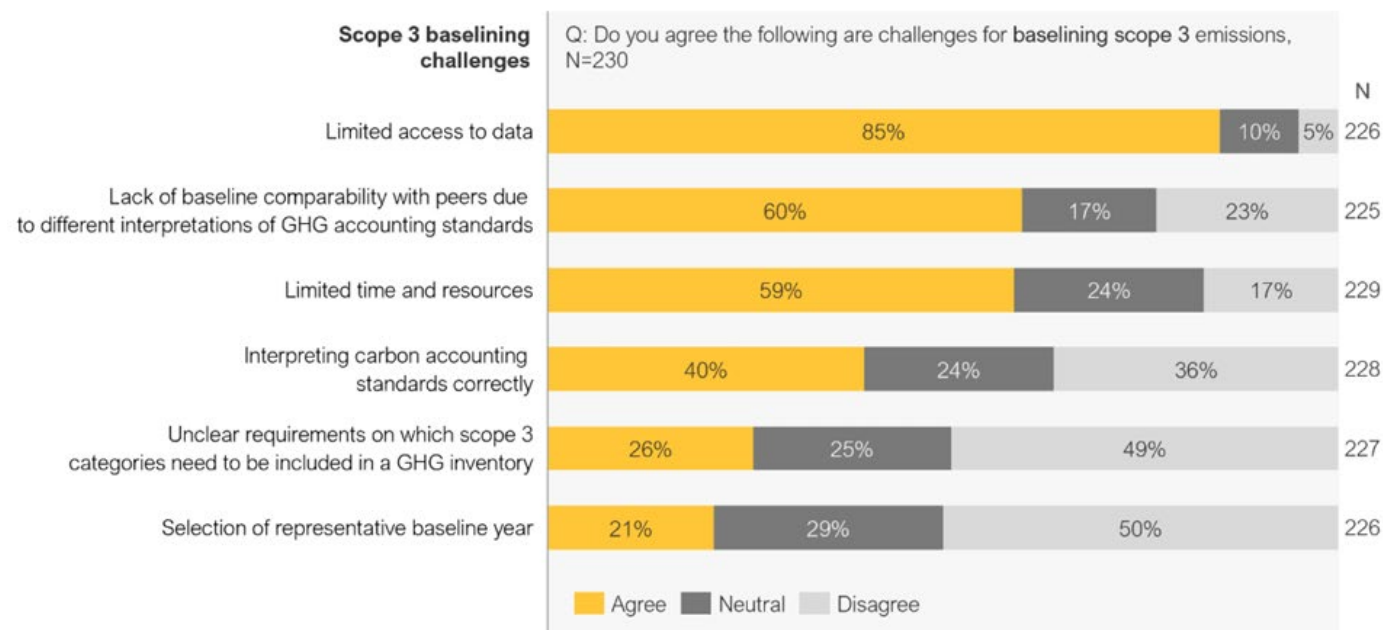
Challenges

- Data access; suppliers
- Limited time/resource
- Complexity of standards

Suggestions

- Get started
- Improve over time (spins)
- Be flexible
- Think long-term
- Collaborate

Figure 2: Challenges associated with baselining scope 3 emissions



Source: CATALYZING VALUE CHAIN DECARBONIZATION, Corporate Survey Results, Feb 2023, Science Based Targets Initiative & BCG

Spend Based Emissions Module

Challenges calculating spend based emissions

- Scale of data
- Categorization
- Emission factors
- Security

SaaS solution

- Simplify data collection
- Intelligent categorisation
- Reduce unknowns, identify key emitters
- Robust and repeatable

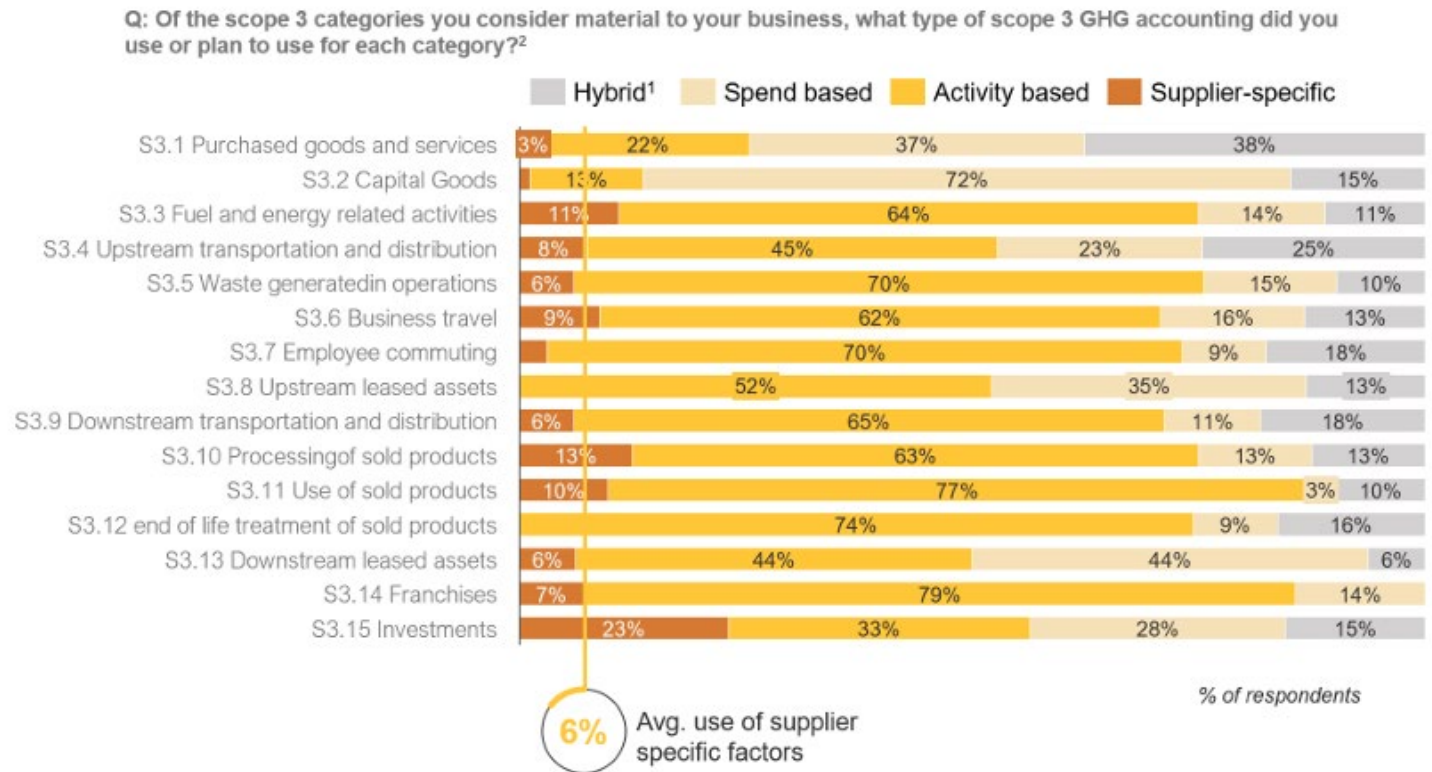
Supports

- Spend based emissions calculation
- Identify material suppliers for direct engagement
- Get quick wins faster!

How

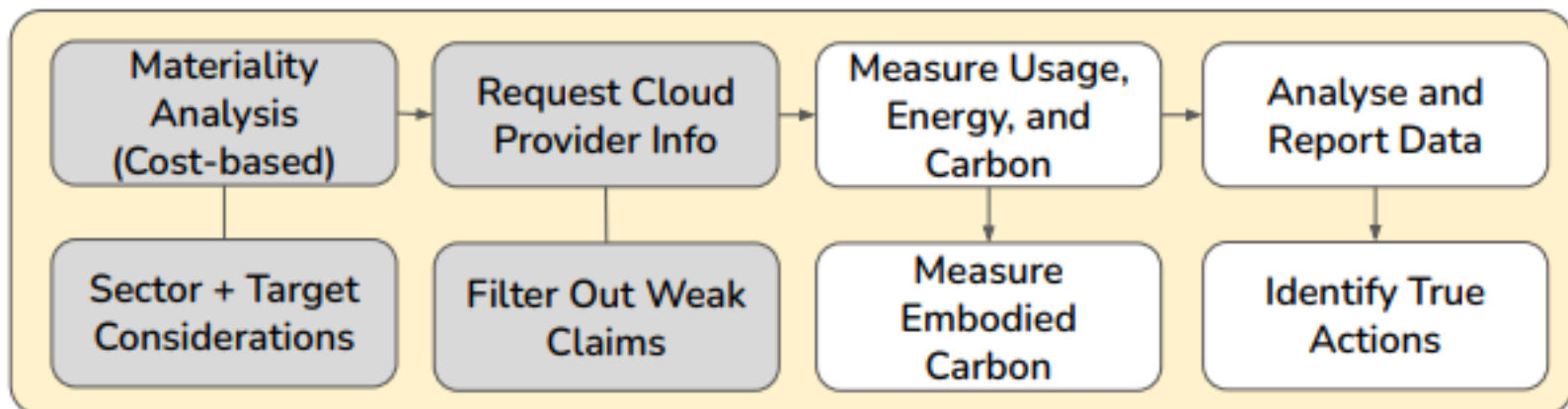
- Contact Dan (dan.tomlinson@esphq.com)
- Companies & Consultants
- Waitlist

Figure 3: Type of emissions factor used for baseline calculations



Source: CATALYZING VALUE CHAIN DECARBONIZATION, Corporate Survey Results, Feb 2023, Science Based Targets Initiative and BCG

Supply Chain Engagement Process (Step 4)



Report highlights:

- 21 footprint charts
- 6 easy wins
- 3 new controls
- 2 updated operating procedures

Key learnings:

- AWS, Azure, Google
- Open source models
- Regional differences
- Architecture matters
- Can enable true impact

Next steps:

- SilverLining SaaS
- Beta program
- Target management
- Consulting
- Certification

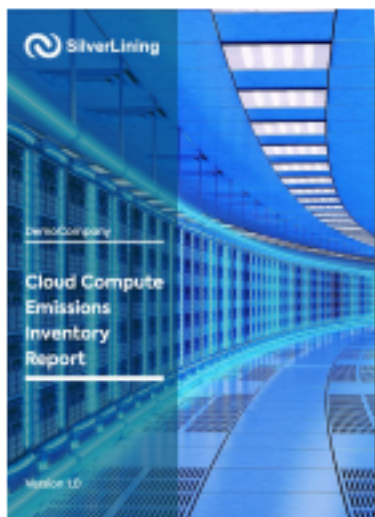
Cogo Drivers:

- Reliant on cloud
- Reporting Obligation

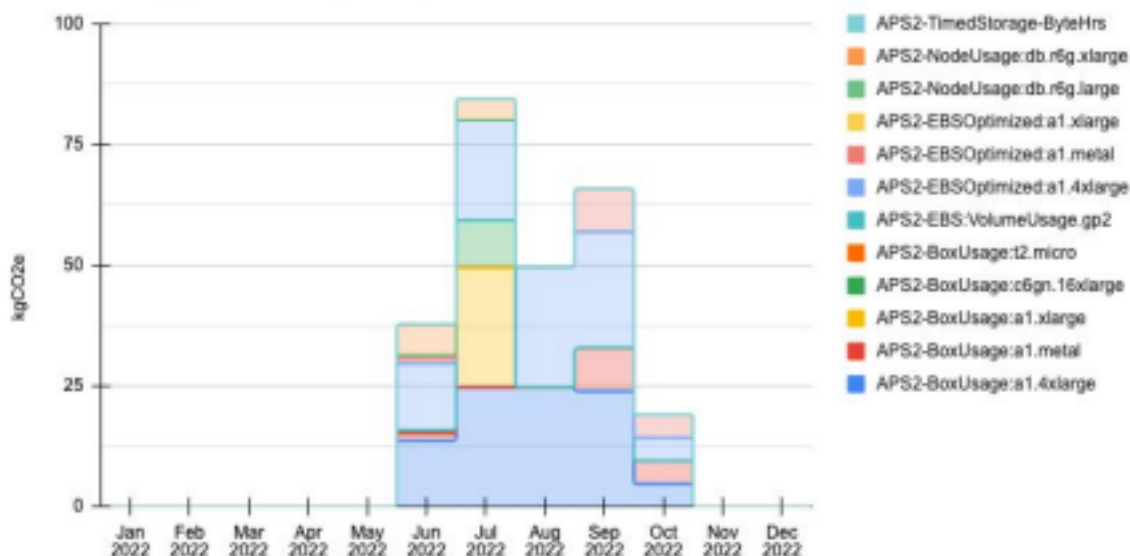
Needs:

- Transparent method
- Accurate footprint
- Levers to reduce

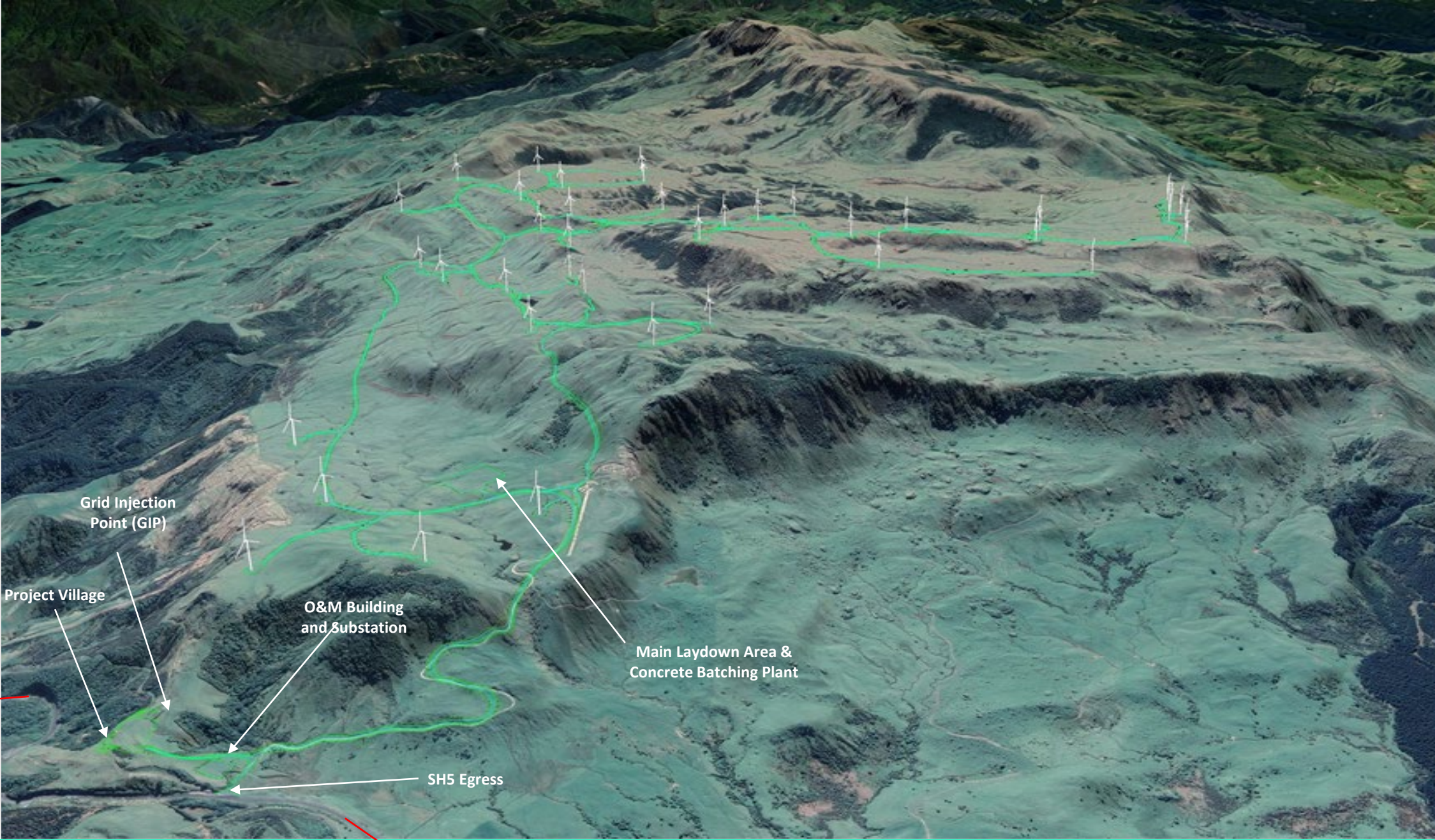
Approx. 10% of Cogo Footprint



Emissions (kgCO₂e/time): bebop-sandbox



Harapaki
in 3D





Sustainability



- Meridian driven
- SMP
- Carbon / GHG
- Set the example – EV charging points on site





Carbon / GHG

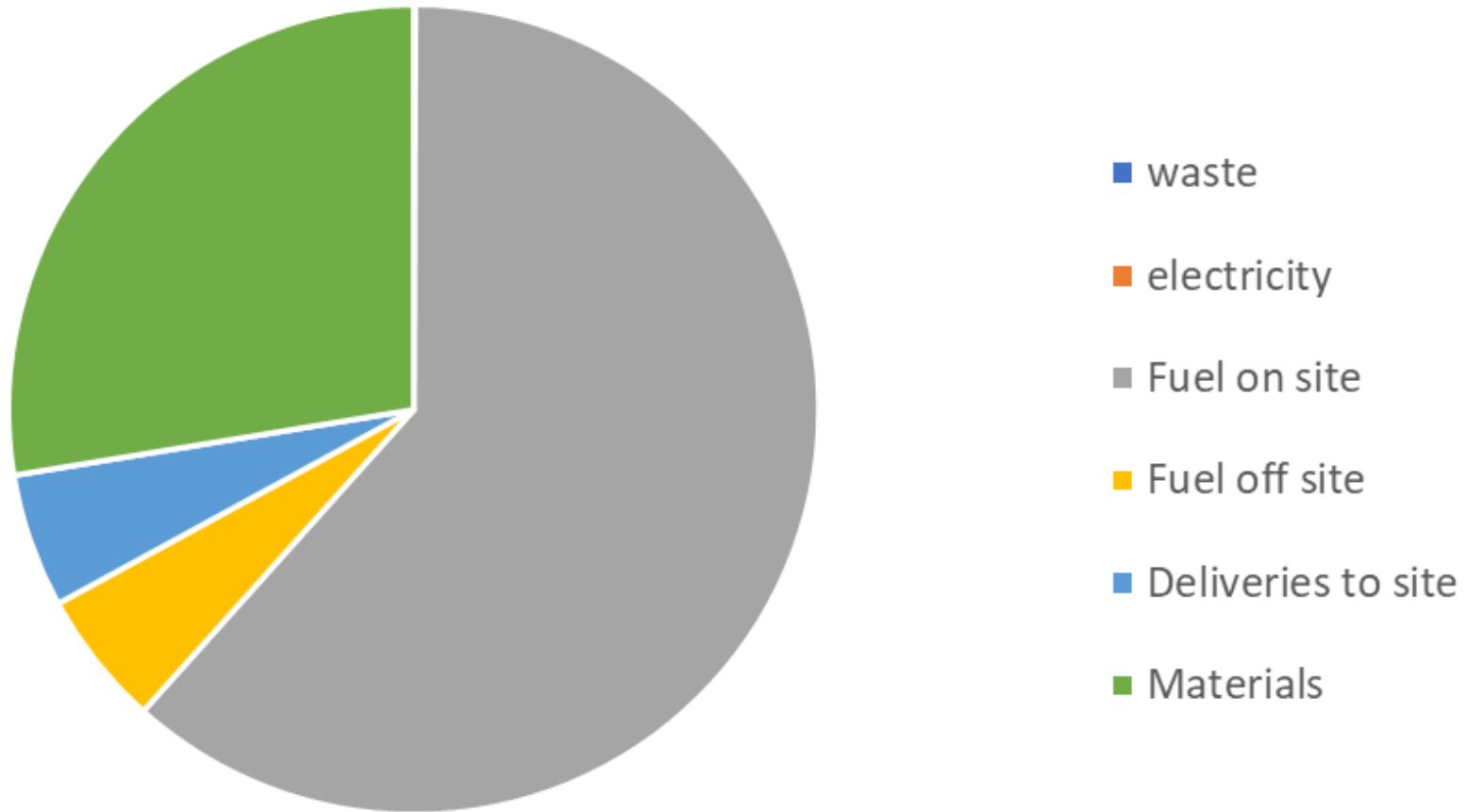
- Starts from planning & procurement
- Contracts
- Hire the right people
- Harapaki first year was 8,200tCO₂ and 15,800tCO₂ to date
- Project KPIs - reporting



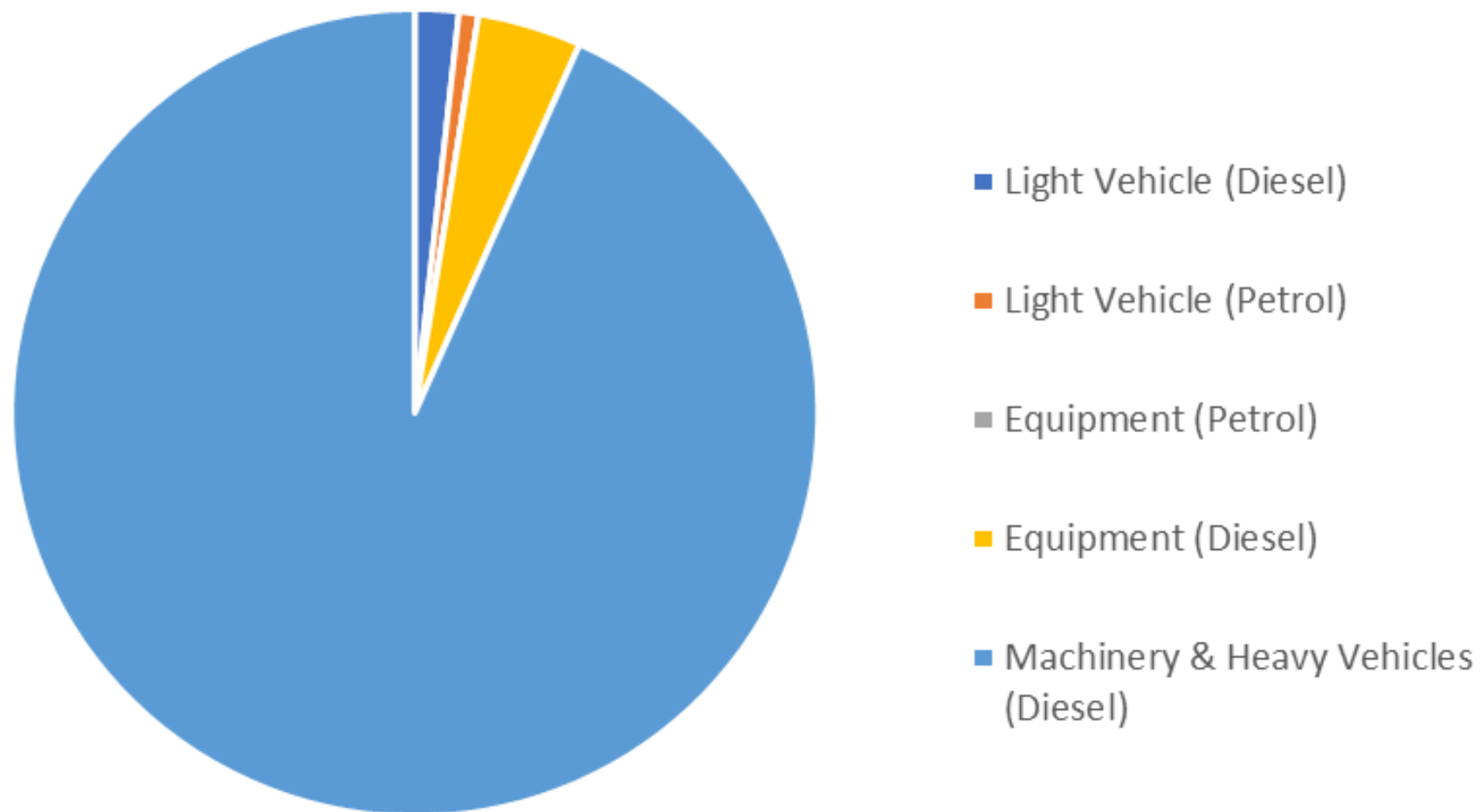
Implementation

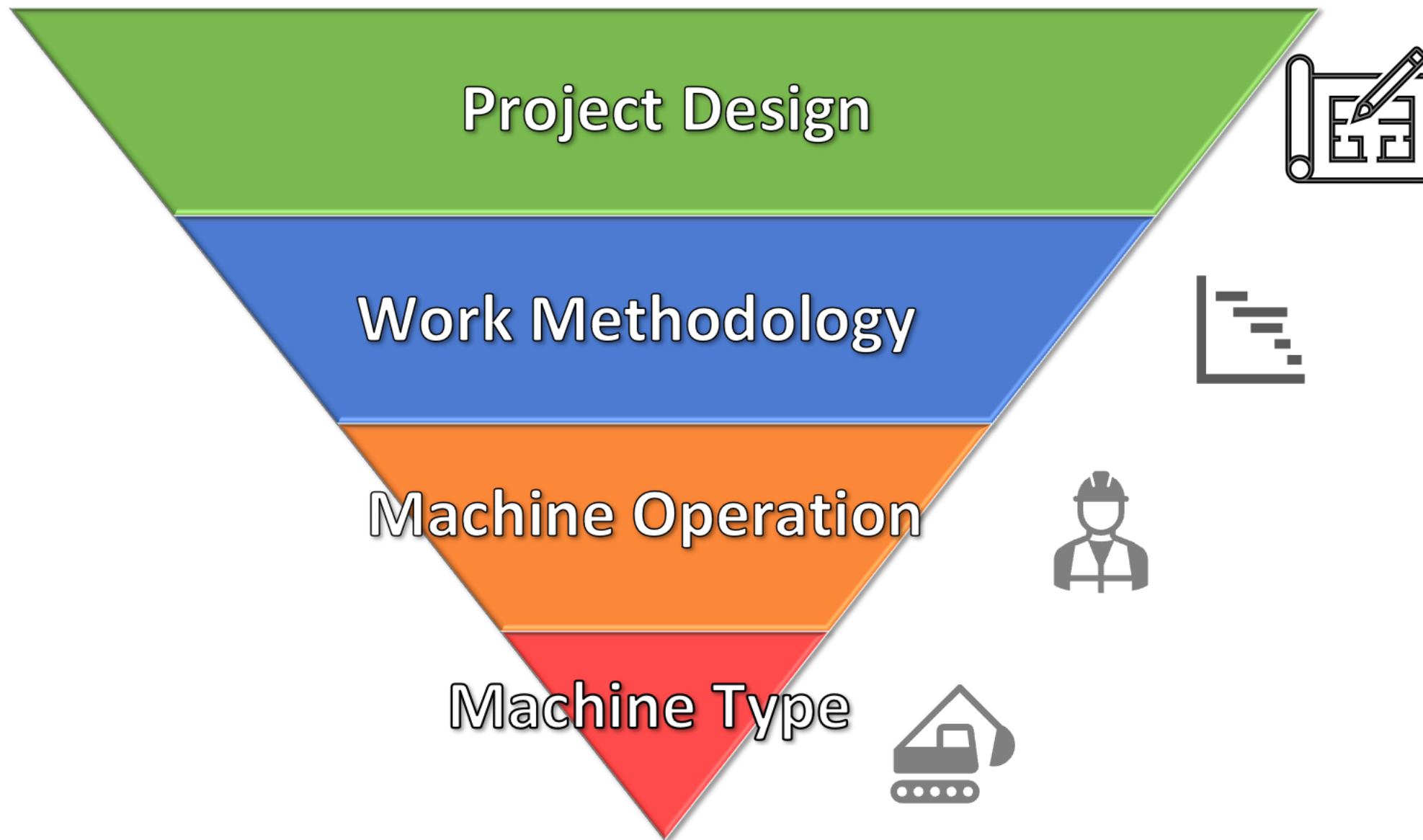
- Contractor specialists on site
- Constantly driven
- Sust moments in meetings
- Focus on key areas
- Follow up constantly
- QC / QA system

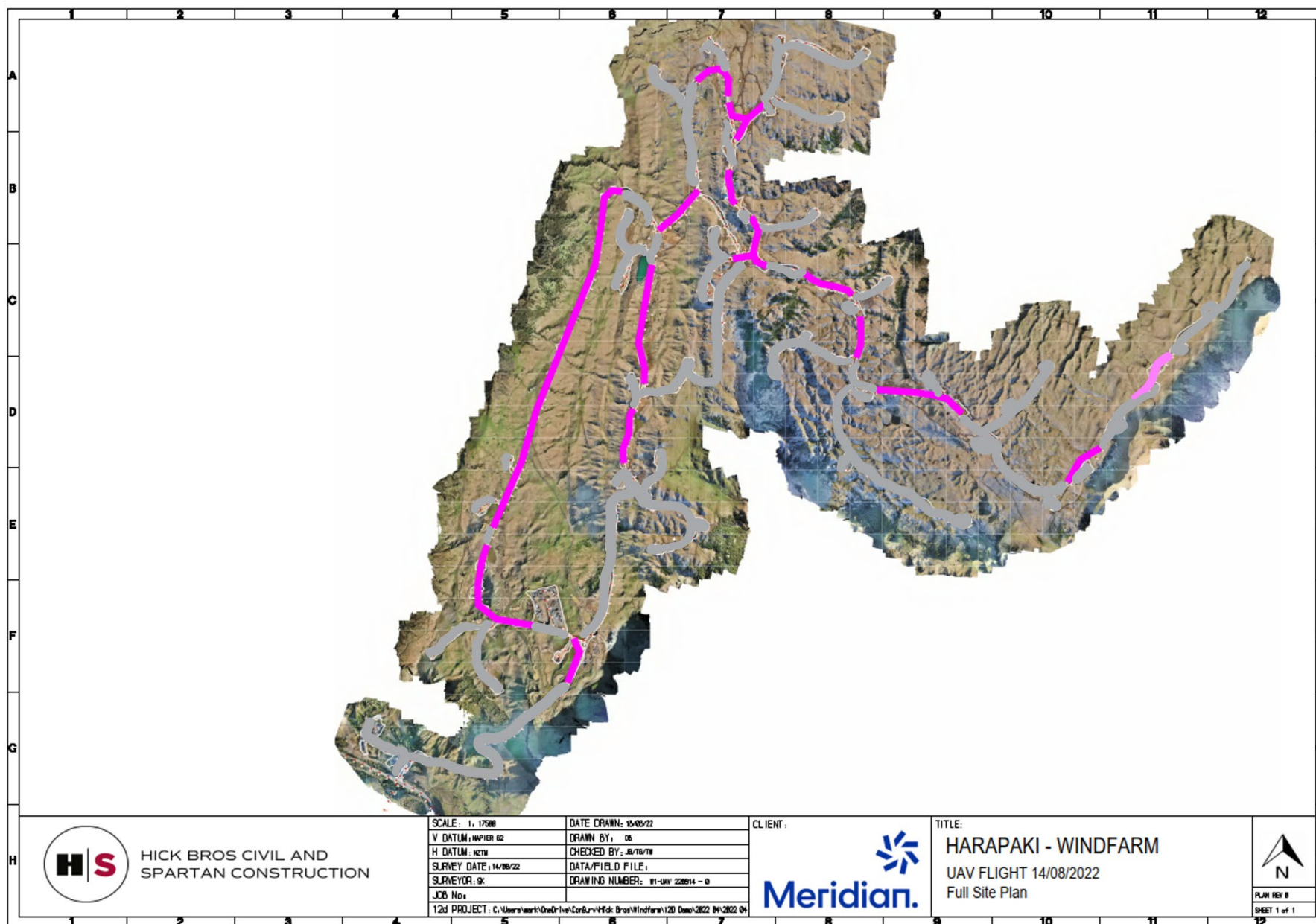
Harapaki HSJV Carbon Footprint



Fuel on Site







Changes to design made by HSJV shown in **pink**.

Unchanged design shown in **grey**.

12,626 m3

HICK BROS CIVIL AND
SPARTAN CONSTRUCTION

SCALE, 1: 1250

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V DATUM: Napier 62

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Meridian.

TITLE:

HARAPAKI - WINDFARM
R307 Realignment



PLAN REV 2

SHEET 1 of 1





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EMISSIONS IN NEW ZEALAND

www.climateleaderscoalition.org.nz