Exploring Scope 3 Emissions

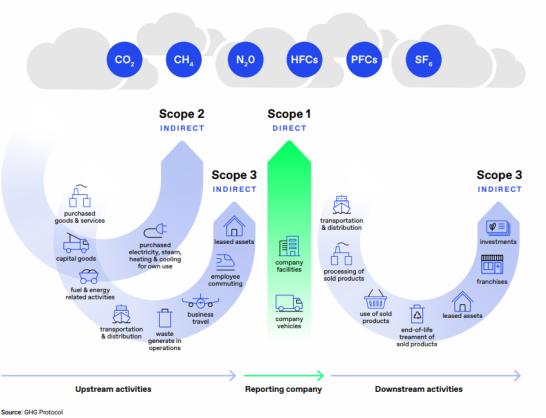
Climate Leaders Coalition Masterclass – May 2023



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.



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?

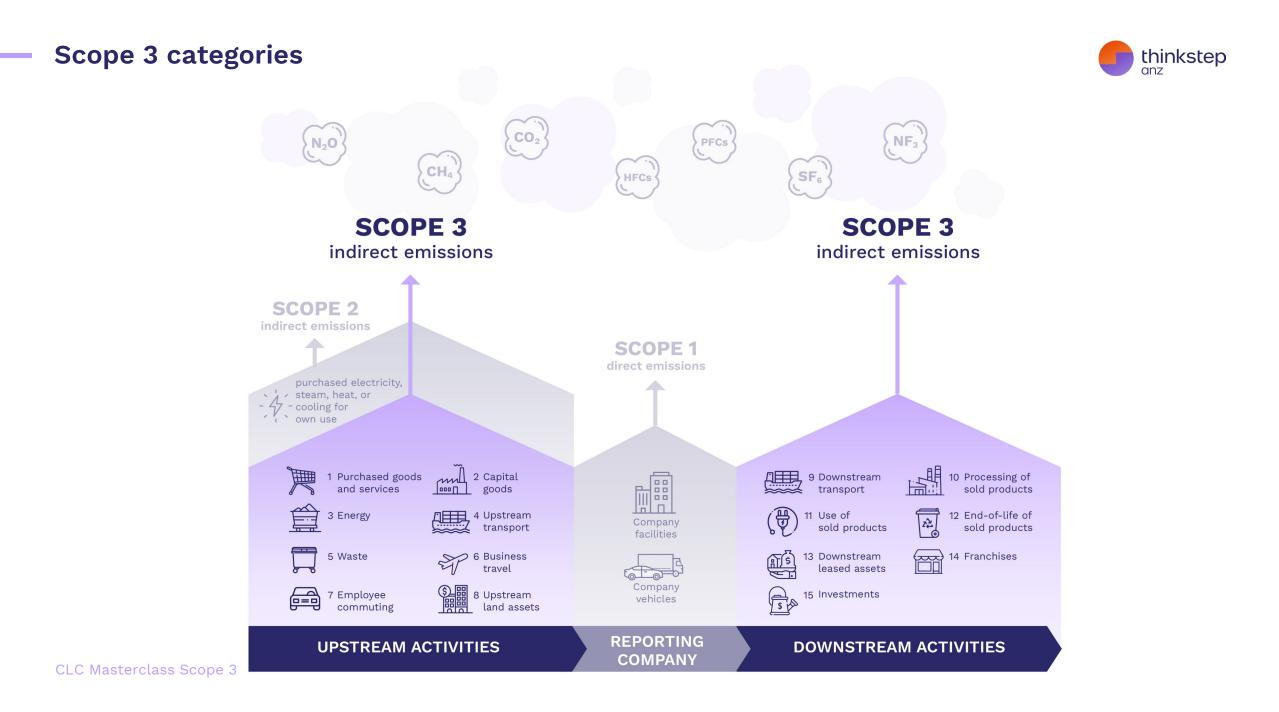






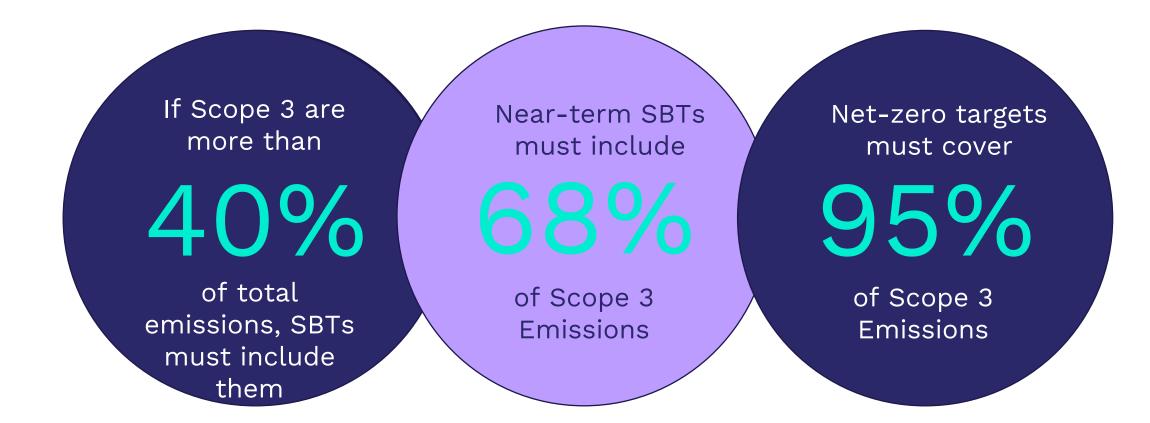
Why your Scope 3 emissions count

CLC Masterclass Scope 3



Scope 3 and science-based target







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

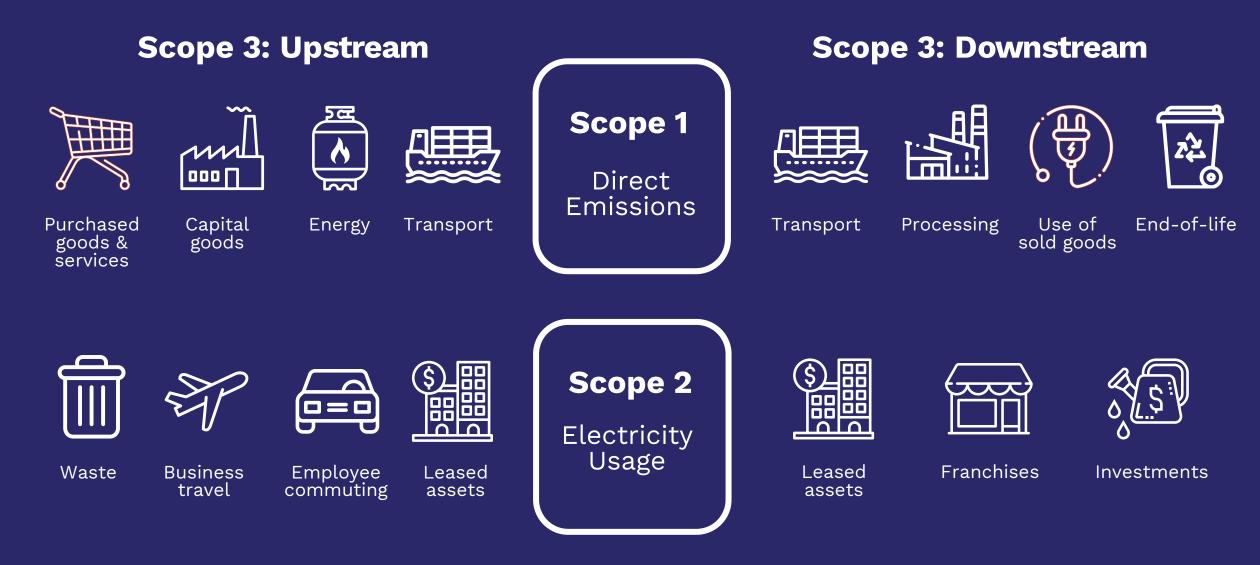
Different categories & sectors

% of total emissions	Scope 1 & 2	1. Purchased goods and services	2. Capital Goods	3. Fuel & energy	_	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%				1%	9%	8%	1%	24%	0%
Chemicals	24%	42%								9%	19%
Industrial Goods & Services	17%	33%			12%	2%	24%	5%	0%	4%	1%
Personal & Household Goods	4%	47%			4%	0%			6%	33%	4%
Construction & Materials	44%	10%		5%	1%	0%			0%	39%	0%
Food & Beverage	11%	63%		4%	6%	0%			9%	4%	2%
Health Care	23%	51%	4%	13%	1%	3%	3%	2%	0%	0%	0%

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Your carbon inventory





CLC Masterclass Scope 3

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 CLC Masterclass Scope 3	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.

Purchased goods and services



• 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
- \rightarrow 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

Availability

Your Scope 3 bible





Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Supplement to the GHG Protocol Corporate Accounting and Reporting Standard

CLC Masterclass Scope 3

Scope 3 explorer





About your organisation/operations

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

✓ Yes		
0 No		
O Not sure		
	← NEXT	

Results





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

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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



and services

Category 4 – Upstream transport



Category 5 - Waste



Category 6 – Business travel



Category 13 – Downstream leased assets



Category 14 - Franchises



Category 15 – Investments



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

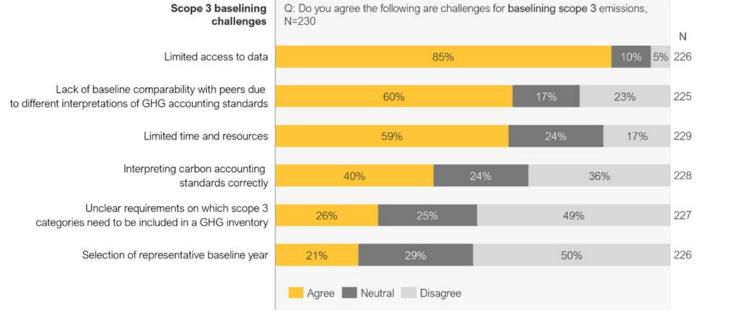
Challenges

- 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, identity key emitters
- Robust and repeatable

Supports

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

How

- Contact Dan (<u>dan.tomlinson@esphq.com</u>)
- Companies & Consultants
- Waitlist

Figure 3: Type of emissions factor used for baseline calculations

Q: Of the scope 3 categories you consider material to your business, what type of scope 3 GHG accounting did you use or plan to use for each category?²

	Hybrid ¹	Spend based 🧧 Activit	y based 📃 Su	pplier-spec	ific
S3.1 Purchased goods and services	3% 22%	37%		38%	
S3.2 Capital Goods	15%	72%			15%
S3.3 Fuel and energy related activities	11%	64%		14%	11%
S3.4 Upstream transportation and distribution	8%	45%	23%	2	5%
S3.5 Waste generatedin operations	6%	70%		15%	10%
S3.6 Business travel	9%	62%		16%	13%
S3.7 Employee commuting		70%		9%	18%
S3.8 Upstream leased assets		52%	35%		13%
S3.9 Downstream transportation and distribution	6%	65%		11%	18%
S3.10 Processingof sold products	13%	63%		13%	13%
S3.11 Use of sold products	10%	77%			3% 10%
S3.12 end of life treatment of sold products		74%		9%	16%
S3.13 Downstream leased assets	6%	44%	449	%	6%
S3.14 Franchises	7%	79%			14%
S3.15 Investments	23%	33%	28%		15%
		use of supplier fic factors		% of respon	idents

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



cogo

Cogo Drivers:

- Reliant on cloud
- Reporting Obligation

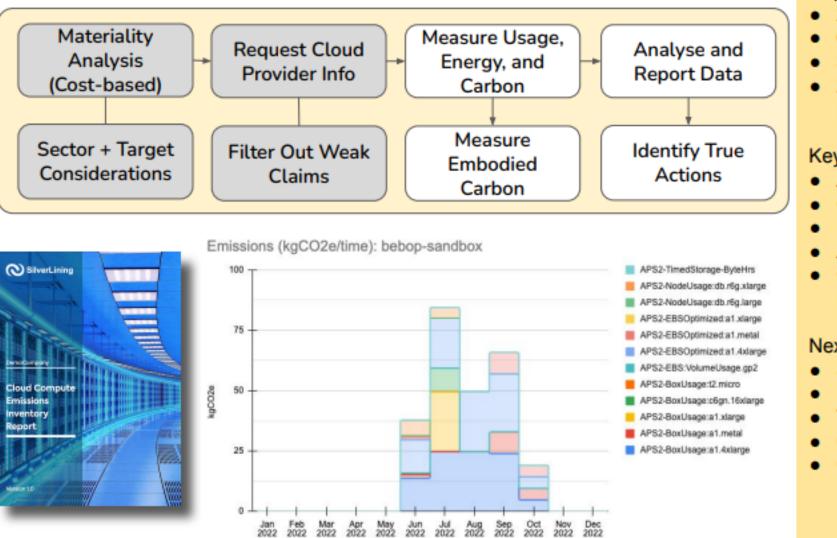
Needs:

- Transparent method
- Accurate footprint
- Levers to reduce

Approx. 10% of Cogo Footprint



Supply Chain Engagement Process (Step 4)



OSilverLining

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

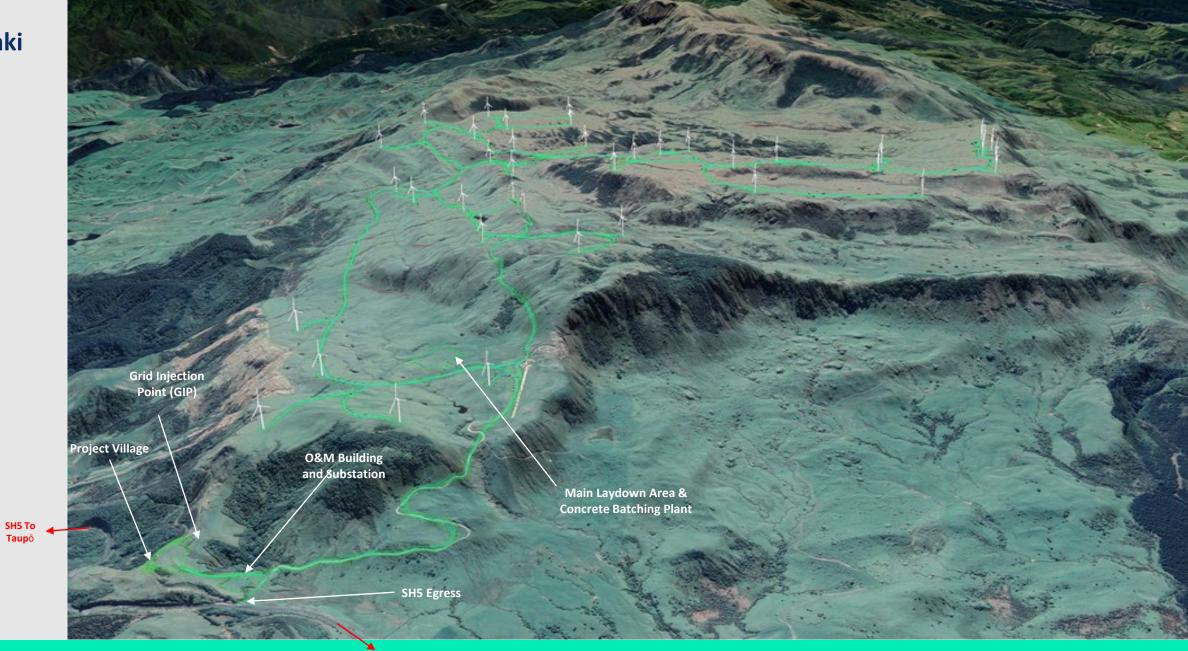
Next steps:

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

brian.johnston@cogo.co

hugh@silverlining.eco

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 15,800tC02
 to date
- Project KPIs reporting

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Monthly GHG Reports

- Vital to get 100%
- Visibility
- Inform future projects
- Lessons learnt registers



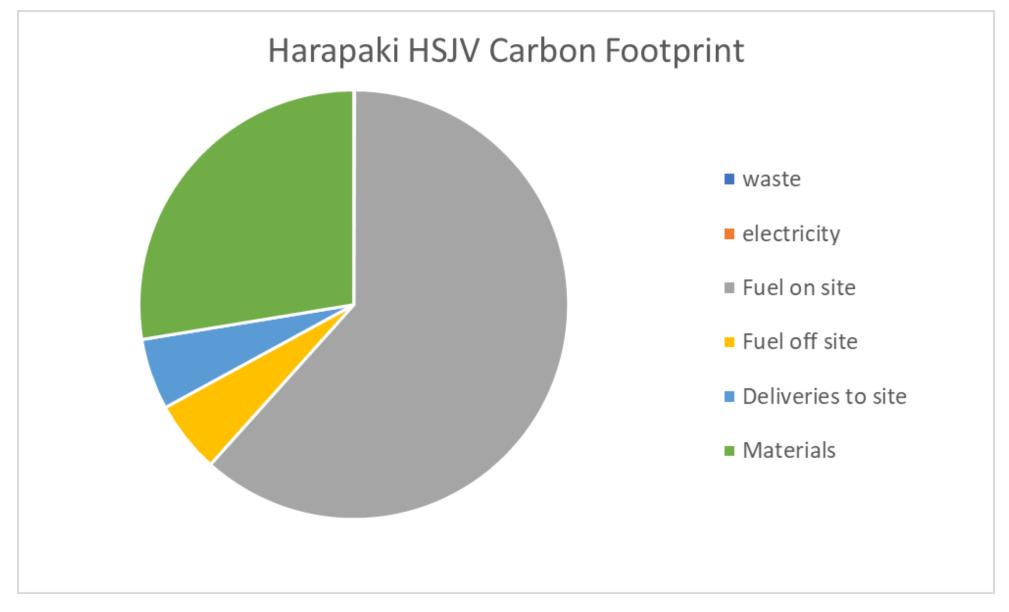


Implementation

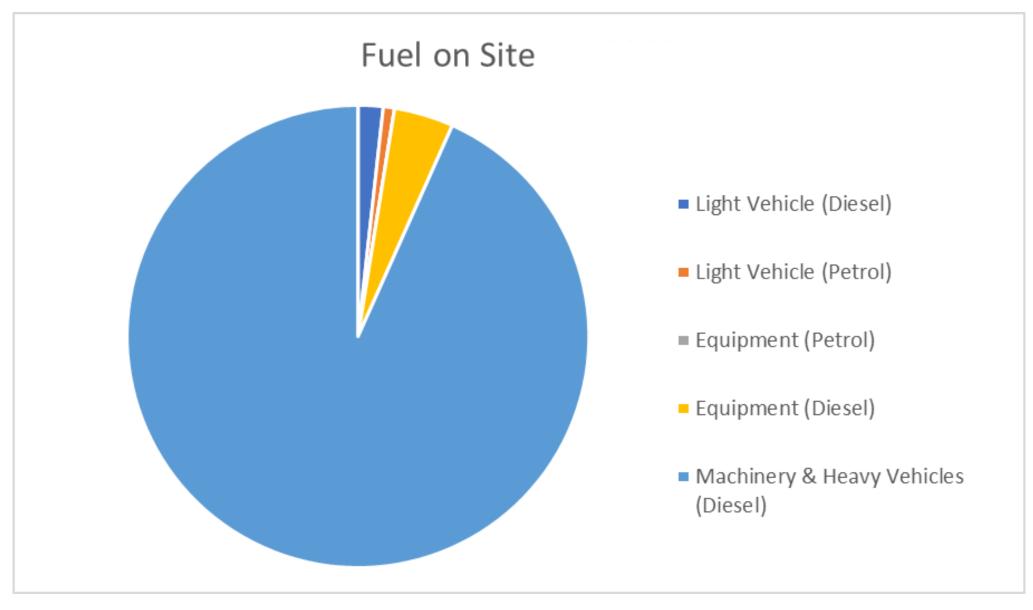
- Contractor specialists on site
- Constantly driven
- Sust moments in meetings
- Focus on key areas
- Follow up constantly
- QC / QA system

🌾 Meridian.

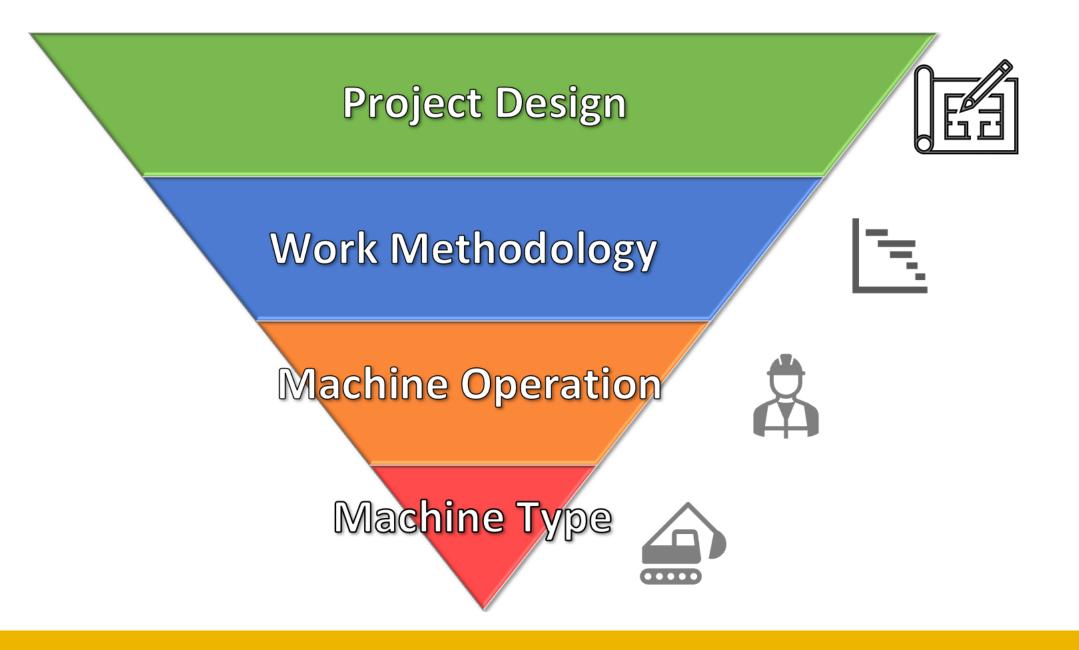




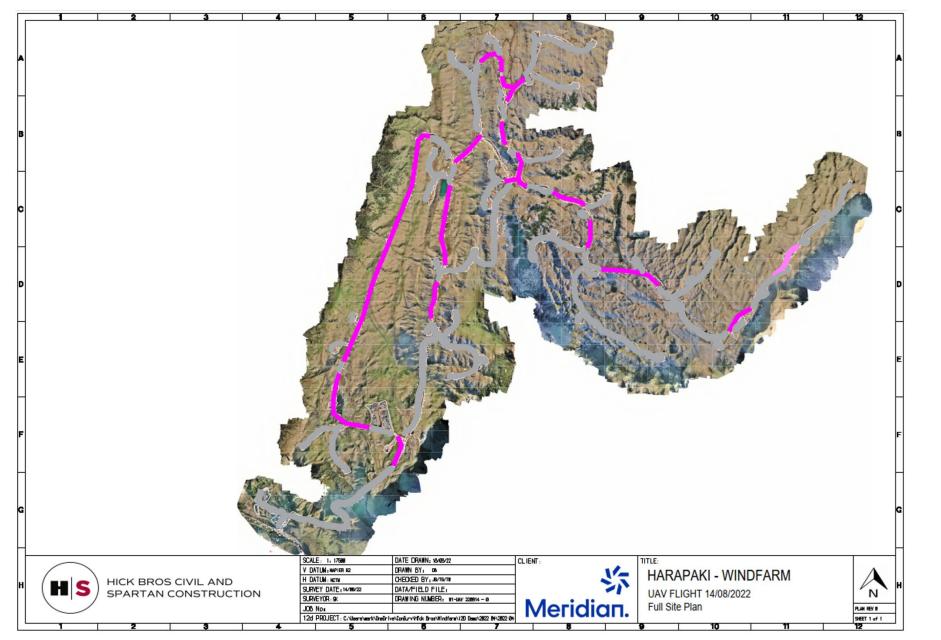






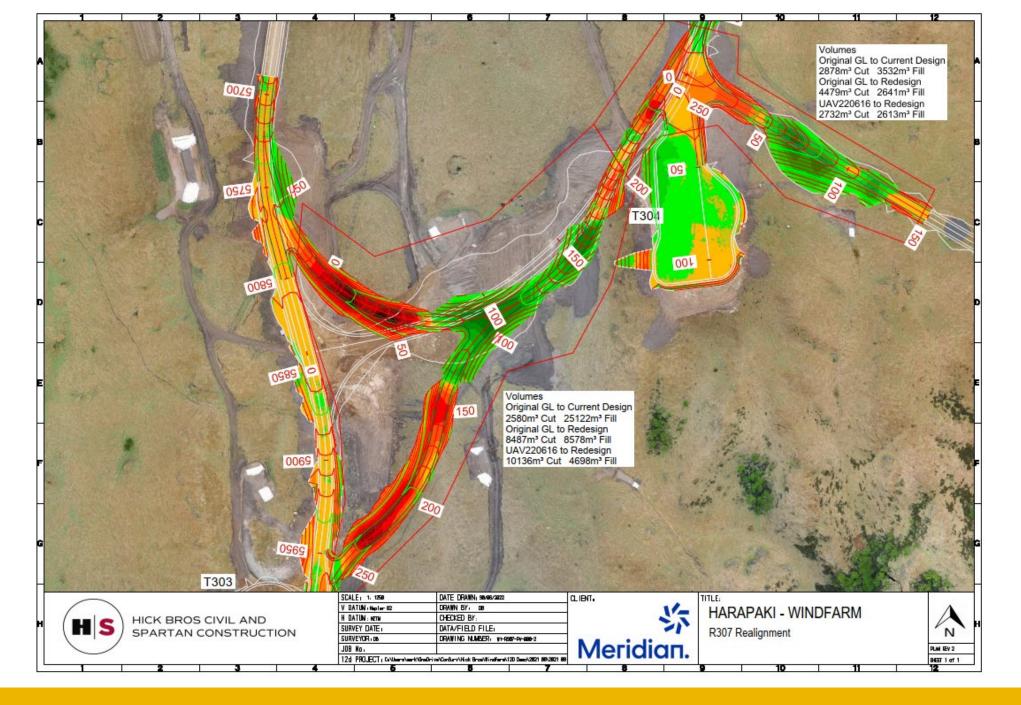






Changes to design made by HSJV shown in **pink**.

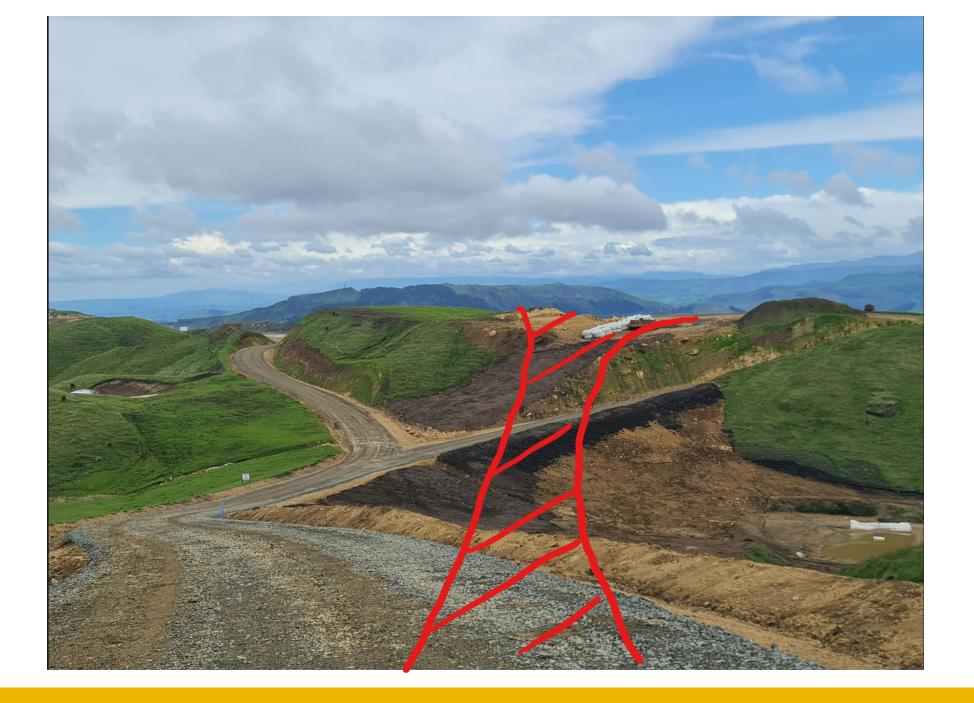
Unchanged design shown in **grey**.





Reduced fill 22,762 m3 Increase Cut 10,136 m3

Total saved 12,626 m3







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