Key take aways

Integrating sustainability into core processes boosting competitiveness and innovation.

● WHO WE SUPPORT

01
OPPORTUNITY TO SAVE ENERGY, CARBON & COST

If done well, asset replacement can be a great lever for saving. It can support long term plans and enable others.

02
ALIGNS WITH NEW SBTi VERSION 2

Allows for a more realistic transition plan. Moves away from linear contraction approach.

03
MINIMISE RISK FROM UNEXPECTED EVENTS

Planning reduces the risk exposure from unexpected events. Have the levers to make informed decisions.

04
EVERY DECISION CAN IMPACT THE NEXT 20 YEARS

Decisions needed every 2 years. The results can impact the next 20 years. Don't build in poor performance

05
START SIMPLE WITH AN ASSET REGISTER

Understand the key assets, their age, cost and depreciation. Plan for when major works are needed.

06
INTERROGATE CURRENT PERFORMANCE & TRENDS

Review supply and demand profiles. This can highlight additional benefits and savings opportunities.

07
ASSESSMENT CRITERIA THAT MATTER TO YOU

Utilise assessment criteria that are unique to you and your goals. Use relevant metrics to assess options.

08
MAKE FINANCIAL METRICS WORK FOR YOU

There are lots of different financial metrics. Utilise those which best support your business case.

09
PREPARE FOR PROCUREMENT & NEXT STEPS

Planning is key to unlocking the next stages. There are several more stages that are needed to unlock savings.

10
WE ARE HERE TO HELP!

Experise across the Food and Drink sector. From opportunity identification to turn key solutions.

/ JUNE 2026

Leveraging Asset Replacement

Prepared by Matt Dickinson & Oliver Brown

With an introduction by Emma Piercy
Head of Climate Change & Energy Policy at FDF

Matt Dickinson
Head of Service
Capital Projects

Oliver Brown
Head of Sector
Manufacturing

Emma Piercy
Head of Sustainability
FDF

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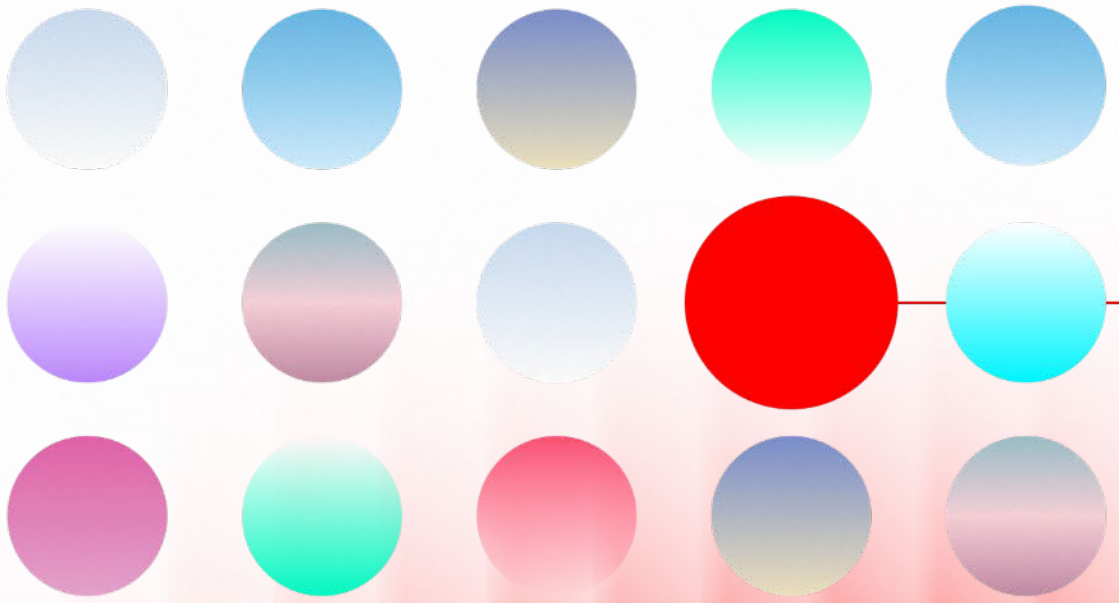
/ WHAT WILL WE COVER?

Webinar objectives



- SBTI & GROUP OBJECTIVES

Demonstrate how asset replacement is key for achieving long term group objectives. Summarise how asset replacement links with SBTi Version 2.

- CASE STUDIES & EXAMPLES

Several real life examples showing the importance of asset replacement. Best practices. And how, if done correctly, it can drive improved performance.

- ACTIONS YOU CAN START ON

Tangible actions that you can start on today! How you can best prepare and future proof opportunities.

/ WHAT WILL WE COVER?

Today's agenda

Who are BIP.Verco & why are we here?

Sustainability consultancy operating in over 10 countries. BIP.Verco supports Food & Drink clients with strategy, reporting and achieving energy and carbon reductions.

Is asset replacement important?

Thorough asset replacement planning is key for de-risking your future. It ensures solutions implemented align with your future aspirations and avoid baking in poor performance.

How does SBTi Version 2 fit in?

New option for addressing scope 1 emissions. Accounts for asset replacement cycles, rather than assuming straight-line reduction. Provides a more flexible pathway.

Good, bad & the ugly [case studies]

Examples of creating demand profiles, options screening assessments and financial analysis. What factors and risks should you be considering?

Where best to start?

Tangible actions that you can start on today! How you can best prepare and future proof opportunities. Starting with an asset register, what are the next steps?

Who is BIP.Verco?

BIP.Verco is BIP's organisational unit dedicated to helping companies turn sustainability into a core business capability and a driver of long-term competitiveness.

DELIVERING WORLDWIDE

26
offices in 10+ countries

+230
dedicated sustainability professionals

OUR IMPACT

5,5 Billions €
public finance budget managed for our clients

18,3 %
ROI achieved for our client on selected sustainability projects

+300 Millions tCO_2eq
Saved emissions thanks to our decarbonisation projects

OUR AREAS OF EXPERTISE

- Sustainability Governance
- Climate & Carbon Management
- Social Impact Management
- Energy Management
- Natural Resources Management

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Our expertise

Understanding where and how we create impact is key to driving sustainable business transformation.

This chart shows how our service capabilities can support you to achieve the levels of organisational transformation.

ESG EXCELLENCE

Strengthen ESG foundations: governance, policies, reporting, and compliance to reduce risk and improve transparency.

Assess | Comply | Report | Certify

- Sustainability Governance & Policies
- ESG Reporting, Assurance & Performance
- Sustainability Risk Assessment & Scenario Analysis
- Sustainability Certifications
- Sustainability Capability Building
- ESG Data & Digital Process Management

SUSTAINABLE TRANSITION

Embed sustainability into strategy and operations: roadmap, targets, and execution to deliver measurable performance and competitiveness.

Plan | Improve | Mtigate | Integrate

- Decarbonization Strategy, Planning & Execution
- Energy Strategy, Management & Efficiency
- Impact & Risk Mtigation
- Natural Resources Management
- Supply Chain Resilience & Logistics Optimization

REGENERATIVE STRATEGY

Redesign for long-term value: regenerative, system-level strategies that drive innovation, resilience, and market leadership.

Exploit | Grow | Innovate | Transform

- Regenerative Business Models
- Sustainability-Driven Strategy & Innovation
- Upstream Sustainability Strategy
- Stakeholder & Community Engagement
- DE&I & Social Impact Management
- ESG DD & Post-deal Sustainability Roadmap

Who trusts us?

BIP.Verco is BIP's organisational unit dedicated to helping companies turn sustainability into a core business capability and a driver of long-term competitiveness.

SUNTORY GLOBAL SPIRITS
Arla
Saputo
Pilgrim's
Moy park
Asahi
firstmilk
MEADOW
Aston Manor Cider
müller
LACTALIS
Cargill
MARS Food & Nutrition
MOLSON COORS beverage company
Noble Foods SINCE 1920
AGRIAL
NUTRICIA
BARRY CALLEBAUT
SAMWORTH BROTHERS
Muntons PASSIONATE ABOUT MALT SINCE 1921
Valeo FOODS
MONBAKE
BAKKAFROST
WILLIAM JACKSON FOOD GROUP
C·H·GUENTHER & SON
Refresco
ABInBev

- OUR AREAS OF EXPERTISE

- Sustainability Governance
- Climate & Carbon Management
- Social Impact Management
- Energy Management
- Natural Resources Management

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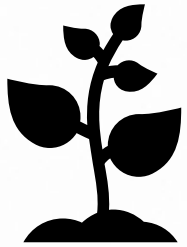
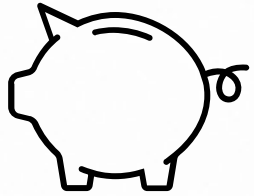
What is asset replacement?



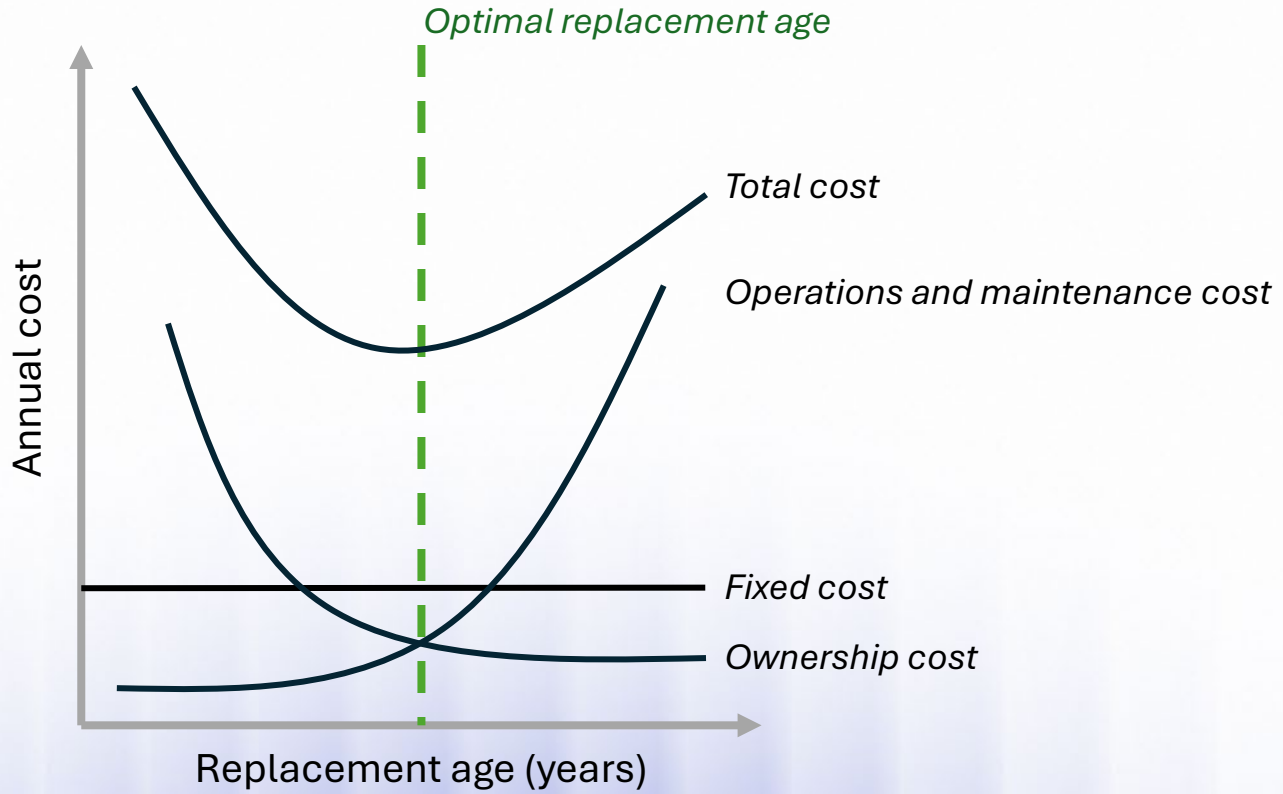


“An asset is an item of economic value that supports the production of goods”

Over time. An asset’s value and performance decreases until it is no longer viable.

- Reliability
  Everything has an expiry date
- Growth
  Upgrading, enhancing, resizing
- Reductions
  Energy and cost saving

What is asset replacement?



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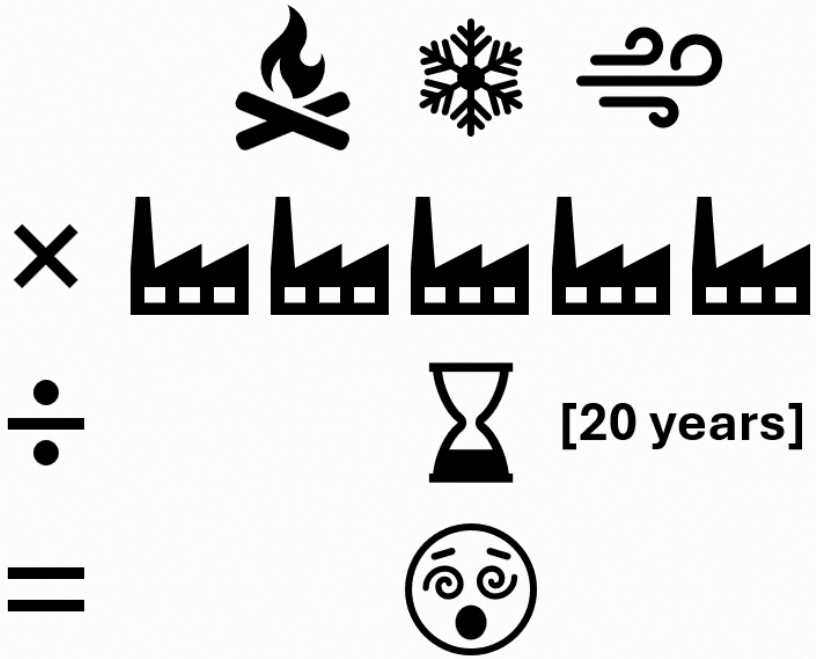
Impact lasts 20 years

Let's say...

Your manufacturing site has: boilers, refrigeration & air compressors

There are 5 sites in your group

All plant equipment has a lifetime (for example 20 years lifetime)



That means...

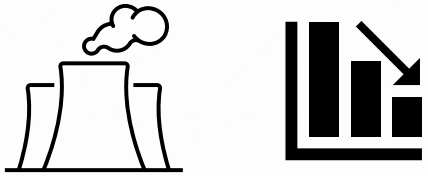
You are replacing an item of plant equipment **every 1.3 years**

Making decisions every 2 years that **impact the next 20 years**

Often it isn't this easy...

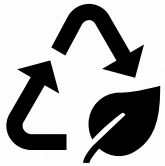
Unexpected breakdowns. Capex shortages. Product changes.

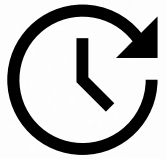
When it goes well...



Risks

- ! Embeds poor performance
- ! Locks in carbon emissions
- ! Contradicts future plans





Benefits

- ✓ De-risks investment
- ✓ Supports transition plan
- ✓ Large energy, carbon and cost savings
- ✓ Improves resilience
- ✓ Enables futures projects

Linking to SBTi Version 2

c. **Asset decarbonization plan targets:** Targets to reduce absolute emissions based on an asset decarbonization plan within a defined carbon budget. Companies using this approach shall:
   i. **Determine emissions from relevant activities:** Quantify absolute emissions for each applicable scope 1 activity in the base year.
   ii. **Carbon budget:** Establish a carbon budget covering the period from the target base year to 2050. Carbon budgets are derived using the Linear Contraction and/or Sectoral Decarbonization Approach (SDA) pathway(s) applicable to the company's scope 1 activities.
   iii. [**Asset decarbonization strategy:** Develop a plan to abate, replace, or phase out the applicable assets that is consistent with the carbon budget. The asset decarbonization strategy shall be disclosed during Initial Validation, and include the measures, timelines, and investment plans to decarbonize assets, including efficiency measures, fuel-switching, and asset replacement, phase-out, or abatement plans.[21]]
   iv. **Cumulative emissions assessment:** Demonstrate how the intended measures maintain cumulative emissions within the company-specific carbon budget.
   v. **Five-year milestones:** Companies shall estimate the emission reductions resulting from the implementation of their asset decarbonization plan based on five-year milestones.

Text from SBTi Version 2 Draft published November 2025

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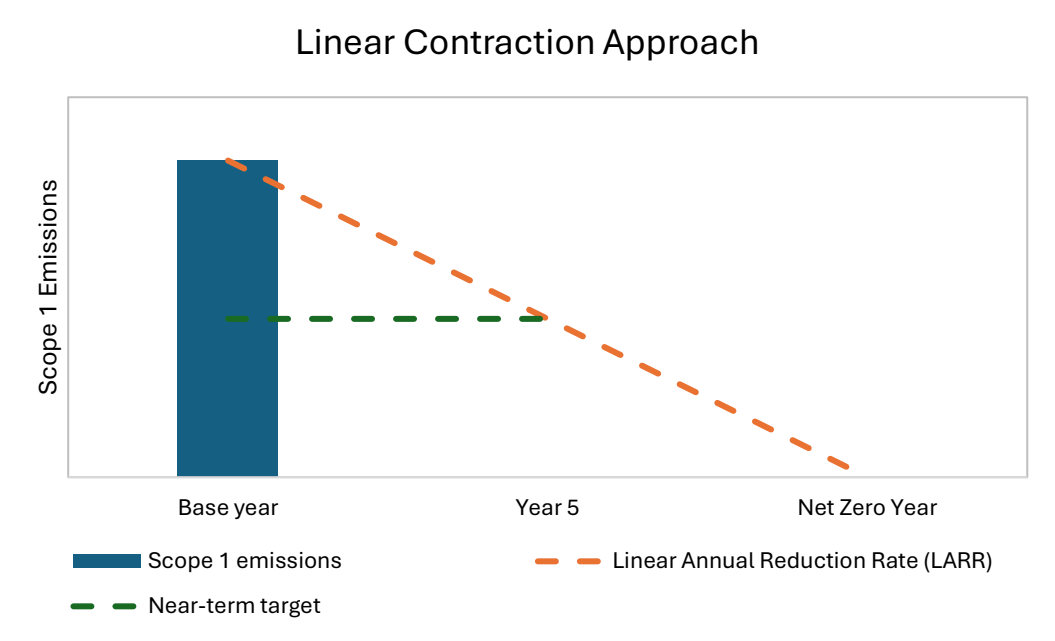
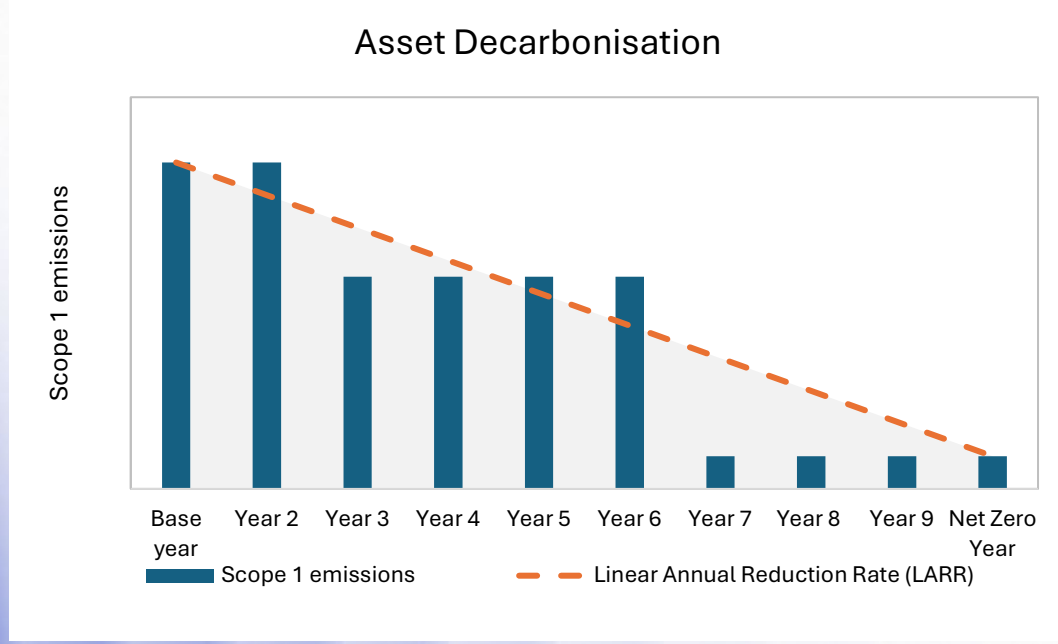
Linking to SBTi Version 2





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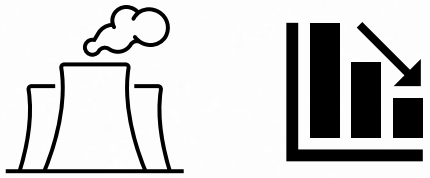
Sounds great in theory...



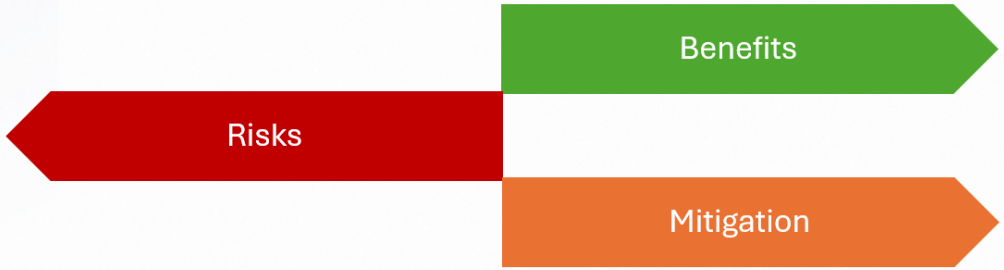
Risks

- ! Embeds poor performance
- ! Locks in carbon emissions
- ! Contradicts future plans

Mitigation

- Review in conjunction with 5 & 10 yr site plans
- Understand the business as usual & no action
- Consider the impact of other projects
- Funding pathways available

Start Here



- MAIN OUTCOMES

Asset register

Demand profiling

Options assessment

Financial assessment

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Asset register

Fixed Asset Register

ID	Description	Model	Supplier	Location	Date Purchased	Est. Lifetime (years)	Cost (k£)	Depreciation method	Decreciation Rate (%)
FA-001	Large steam boiler	ABC45	Best Boilers	Boiler House	01/01/2020	25	500	Straight	33%
FA-002	Medium steam boiler	ABC46	Best Boilers	Boiler House	01/01/2020	25	400	Straight	33%
FA-003	Back up boiler	ABC45 (2002)	Old Boilers	Boiler House	31/12/2014	25	250	Straight	33%
FA-004	Boiler house pump A	Centri 407	PumpsRus	Boiler House	16/03/2016	20	15	Straight	33%
FA-005	Boiler house pump B	Centri 407	PumpsRus	Boiler House	16/03/2016	20	15	Straight	33%
FA-006	Ammonia compressor 1	Screw 404	Compressors4U	Plant Room 4	30/06/2017	15	150	Straight	33%
FA-007	Ammonia compressor 2	Screw 404	Compressors4U	Plant Room 4	30/06/2017	15	150	Straight	33%
FA-008	Ammonia compressor 3	Screw 404	Compressors4U	Plant Room 4	01/01/2012	15	150	Straight	33%
FA-009	Ammonia compressor 4	Screw 404	Compressors4U	Plant Room 4	01/01/2012	15	150	Straight	33%

- Allow us to know status, procurement date, location, price, depreciation and current value
- Ensures all assets remain compliant
- Estimates maintenance costs
- Supports budgeting and planning

Case study #1 boiler replacement

Client:
World leading provider of meat, poultry and prepared foods

Key operations:
- *Processing (slicing)*
- *Refrigerating*
- *Cooling*
- *Hygiene (hot wash)*
- *Packing*

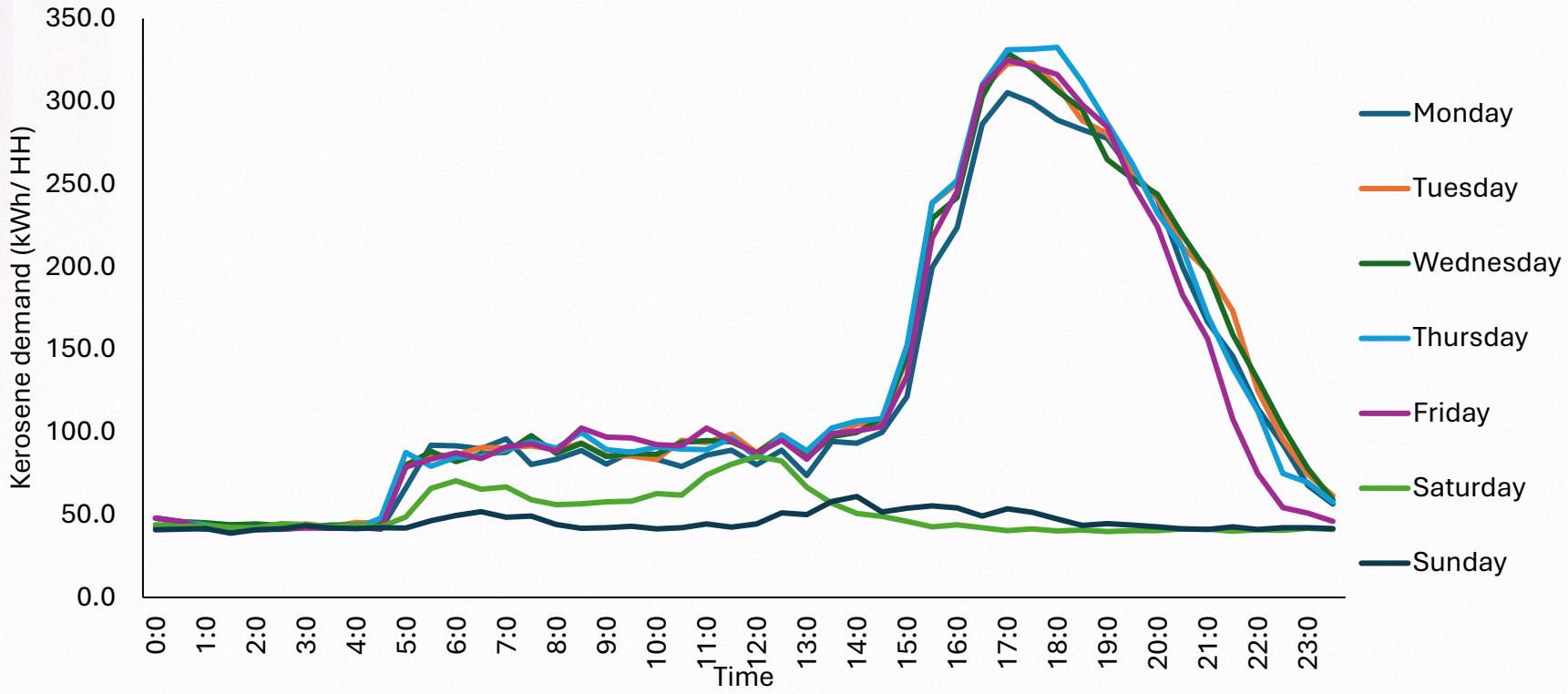
Challenge:
Find a low carbon and economical replacement for existing steam boiler

Contribute to net zero carbon reduction targets

Maintain operation and improve resilience of systems

Key considerations:
- *Main heat demand is hot water for cleaning*
- *Cleaning takes place in the evenings after production*
- *No central refrigeration plant*
- *Boiler house and air compressors are located near by*
- *Existing steam distribution pipework is old and must be replaced*

Demand profiling



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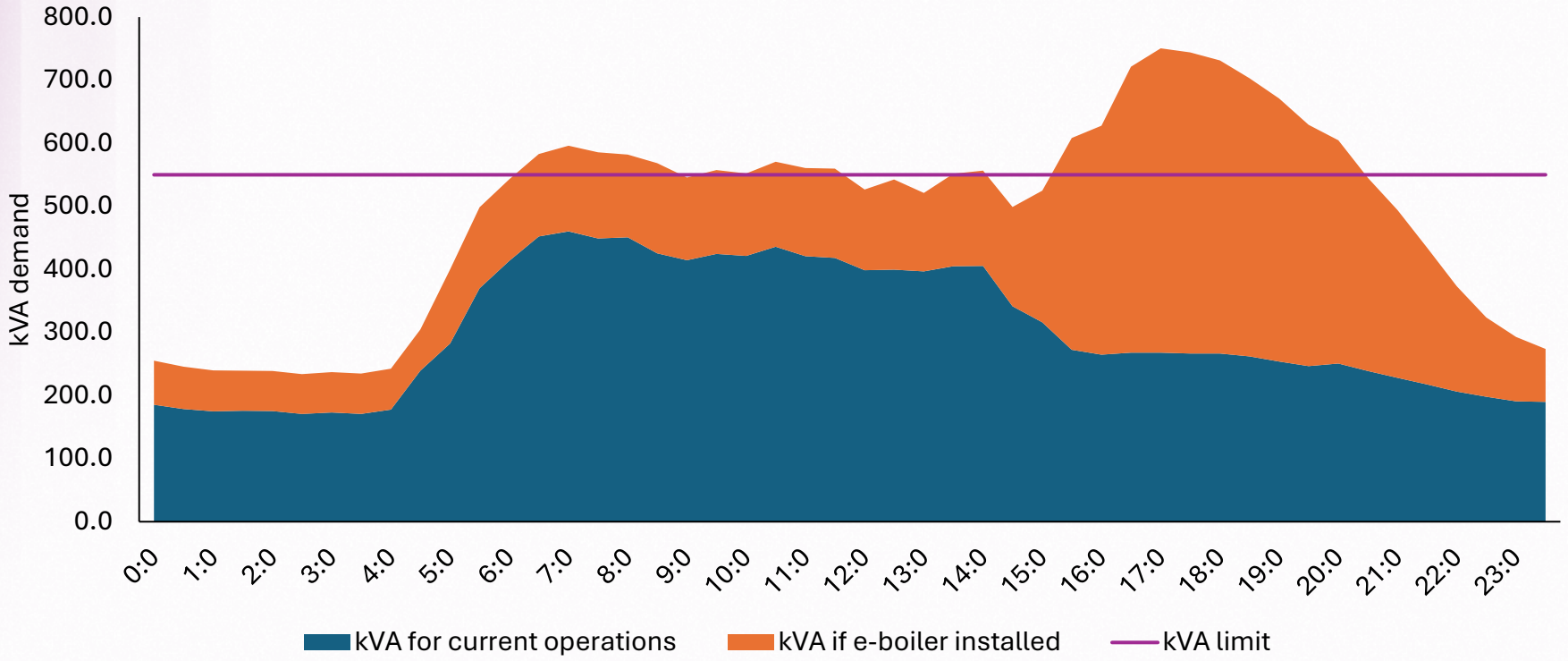
Demand profiling



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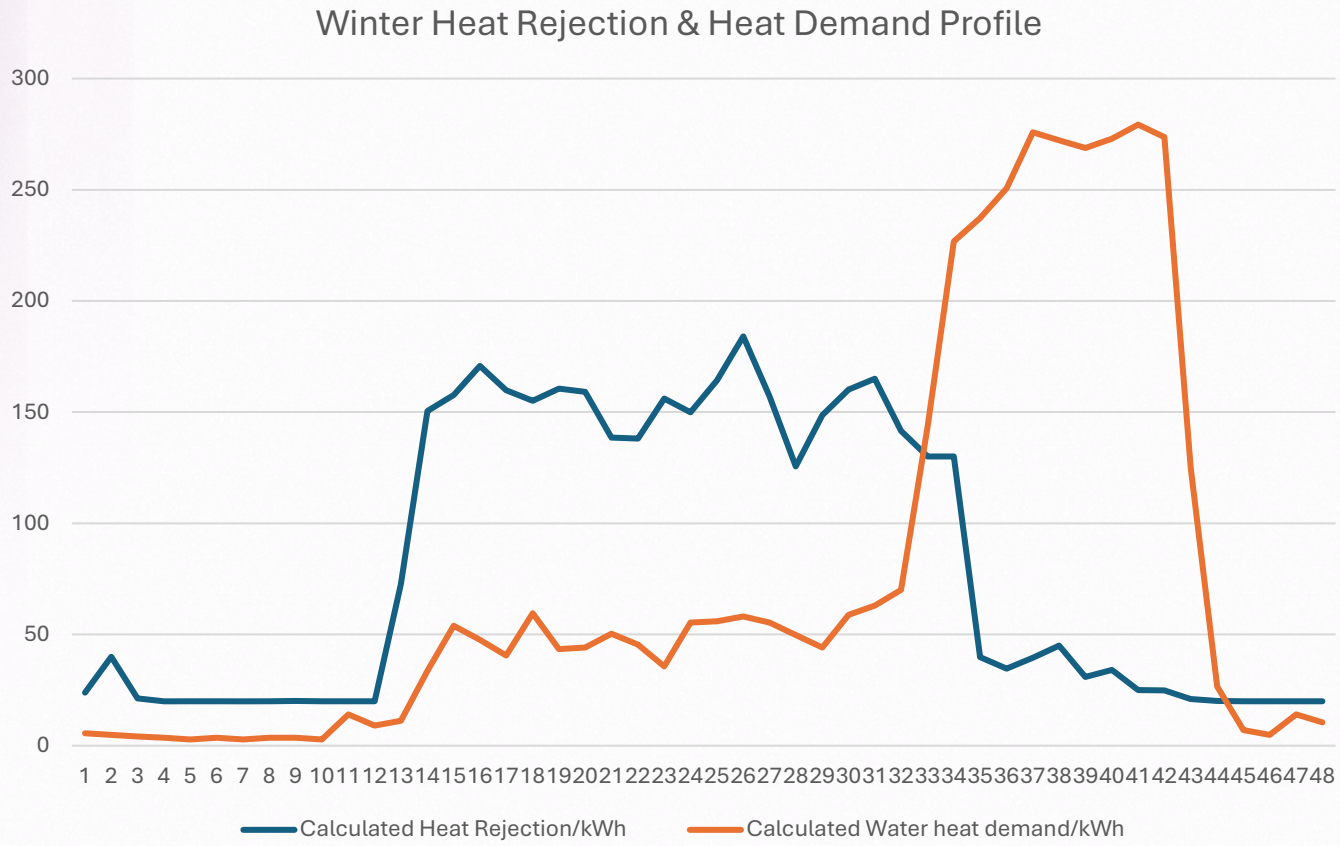
Demand profiling



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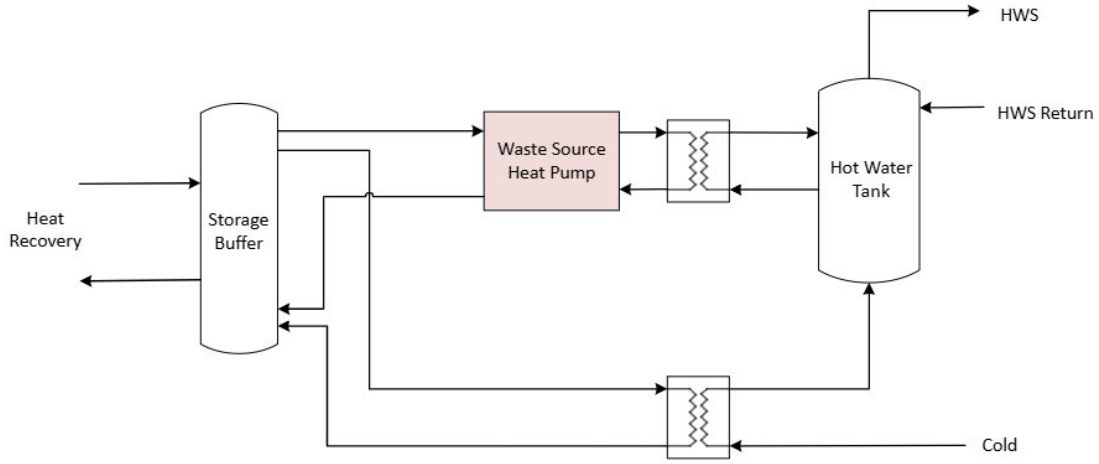
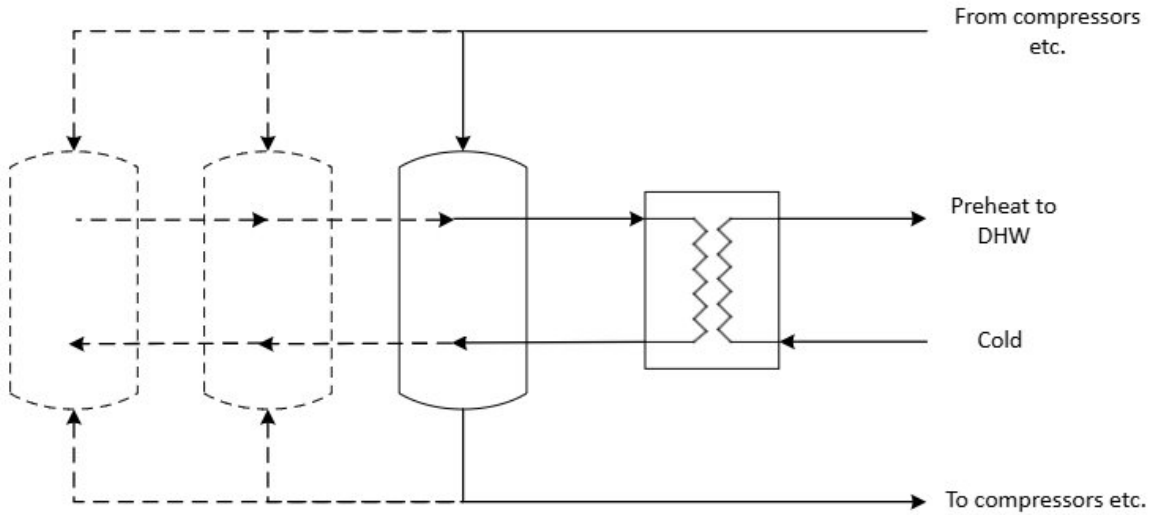
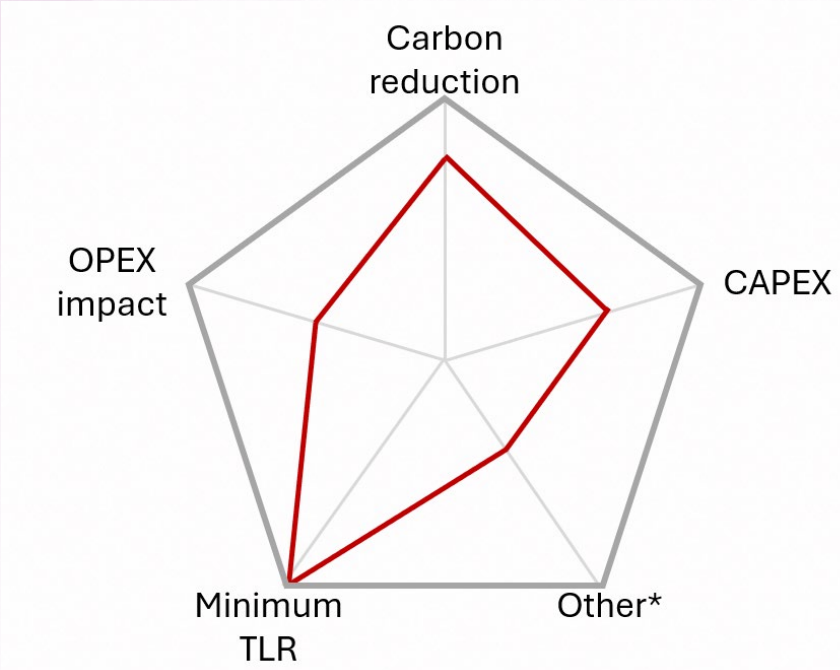
Options development

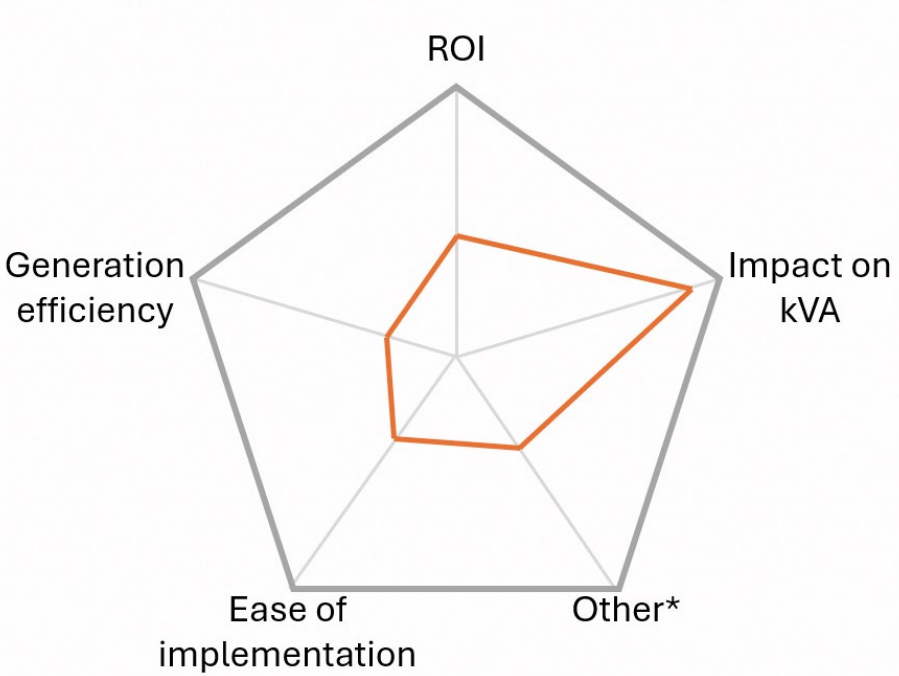




Options assessment



Site A's priority assessment criteria



Site B's priority assessment criteria

*Other could include site specific factors such as redundancy

Options assessment

	Technology maturity	Capacity	Availability	Carbon target compliant	Potential zero carbon impact	CAPEX	OPEX	Footprint	Indicative overall risk (relative)
CHP (various fuels)									High
Electric boilers/ hot water generators									Medium
Direct electric storage (Caldera)									Medium
Hydrogen									High
Geothermal <90degC									High
Chiller HP									**Low**
ASHP									Medium
Biomass boiler/ hot water generator									Medium
LPG boiler & heat recovery									Low

Financial assessment

Term	Meaning	How is it used?
NPV	Net Present Value	*Evaluates profitability by calculating the difference between present value and expected cash flow*
TCO	Total Cost of Ownership	*Accounts for direct and indirect costs over the assets lifetime*
IRR	Internal Rate of Return	*Estimates profitability by showing annualised compound return rate*
Payback	Investment divided by annual savings	*Initial screening to look at potential returns*
ROI	Return on Investment	*Determines the efficiency of an investment*
Carbon Cost	Additional tariff related to carbon emissions	*Disincentivises projects that do not align with carbon reduction goals*
Marginal Cost	Cost to produce one additional unit	*Removes the impact of ancillary costs such as additional costs for infrastructure*

Case study #2
CHP replacement

Client:
Leading hi-tech manufacturing company

Key operations:
- *Workshops*
- *Clean rooms*
- *Space heating*

Challenge:
Achieve net zero carbon reduction targets

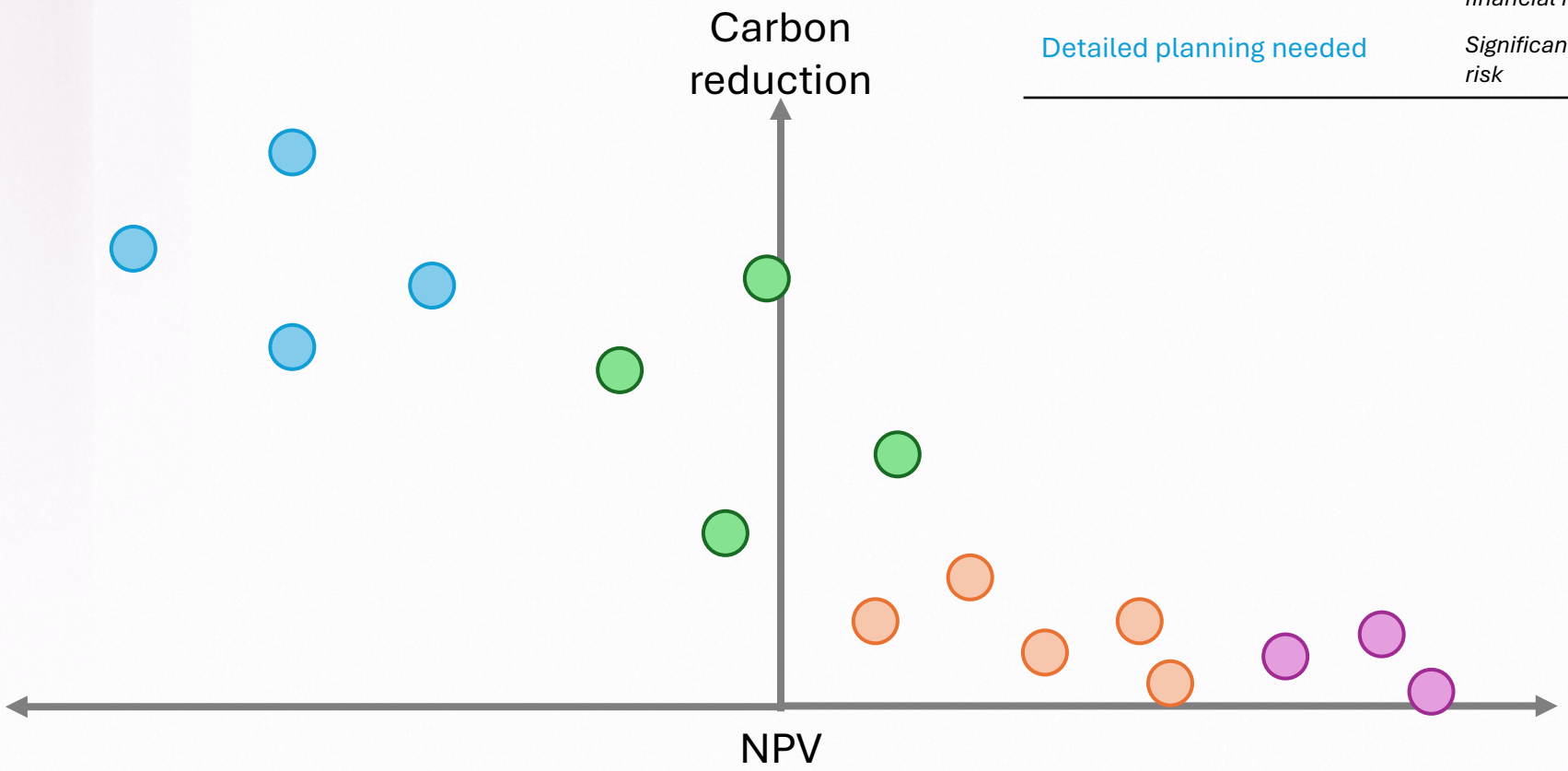
Find a low carbon replacement for existing CHP units

Complex site with multiple buildings and sources of waste heat

Key considerations:
- *Close temperature control required year round*
- *Operations must be maintained during replacement works*
- *SBTI targets do not allow for purchase of RGGO, replacement must be electric*

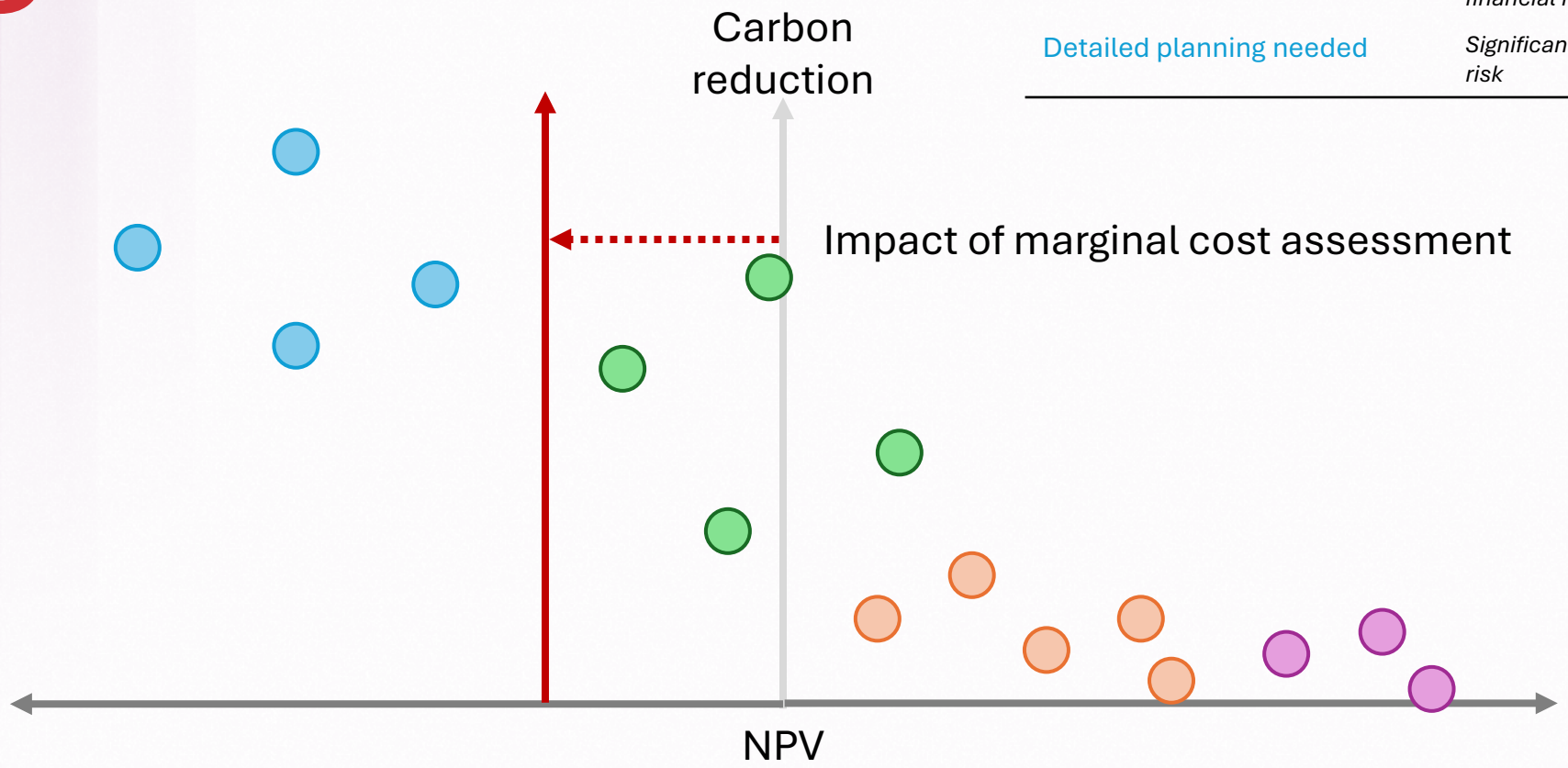
Financial assessment

Key	
Action required	*Low carbon impact and financial risk*
Do first	*Balanced carbon impact and financial risk*
Review benefit to reward	*Low carbon impact and moderate financial risk*
Detailed planning needed	*Significant carbon impact and financial risk*



Impact of marginal cost

Key	
Action required	*Low carbon impact and financial risk*
Do first	*Balanced carbon impact and financial risk*
Review benefit to reward	*Low carbon impact and moderate financial risk*
Detailed planning needed	*Significant carbon impact and financial risk*



Case study #3
Dairy energy centre

Client:
Global dairy company with impressive sustainability targets

Key operations:
- *Refrigeration/ cooling*
- *Pasteurisation*
- *Process (homogenisation, separations)*
- *Cleaning*

Challenge:
Achieve net zero carbon reduction targets

Assess options to supply site's future energy demand

Key considerations:
- *Heat demands on site are lower than 100 degC*
- *Several sources of waste heat available*
- *Existing project to upgrade refrigeration plant*
- *Favourable capex and grant funding available*

Sensitivity analysis

			Electricity price change (£/ kWh)						
			-30%	-20%	-10%	0%	10%	20%	60%
			0.14	0.16	0.18	0.2	0.22	0.24	0.32
Fuel price change (£/ kWh)	-50%	0.03	5.22	5.45	5.71	6.00	6.32	6.67	8.57
	-25%	0.04	3.64	3.75	3.87	4.00	4.14	4.29	5.00
	-10%	0.05	2.79	2.86	2.93	3.00	3.08	3.16	3.53
	0%	0.06	2.26	2.31	2.35	2.40	2.45	2.50	2.73
	10%	0.07	1.90	1.94	1.97	2.00	2.03	2.07	2.22
	25%	0.08	1.64	1.67	1.69	1.71	1.74	1.76	1.88
	50%	0.09	1.45	1.46	1.48	1.50	1.52	1.54	1.62

What next

01
Initial Assessment
(4 weeks*)

- ✓ High-level consumption assessment
- ✓ High-level savings assessment
- ✓ High-level list of actions with quantified savings vs cost

Go/ No-Go Decision

02
Scope, Design Roadmap & Business Case

- ✓ Detailed consumption assessment
- ✓ Actionable implementation roadmap and scope definition
- ✓ Detailed business case with defined KPIs
- ✓ Detailed benefit roadmap

Go/ No-Go Decision

03
Vendors Selection & Tendering

- ✓ Competitive vendor selection process
- ✓ Defined and negotiated contractual structure
- ✓ Vendors onboarding

04
Execution

- ✓ Solution roadmap execution
- ✓ Structured governance and KPIs monitoring

05
Continuous Improving

- ✓ Tracking of financial & environmental savings and KPIs.
- ✓ Continuous improvement actions

What next

01 Initial Assessment
(4 weeks*)

- ✓ High-level consumption assessment
- ✓ High-level savings assessment
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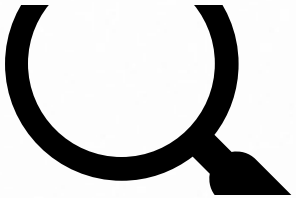
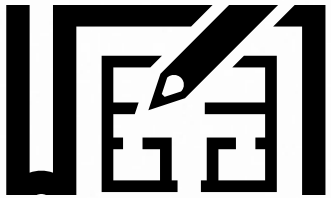
How do we help?



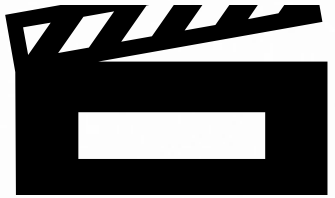
IDENTIFICATION

- Deep dive audits
- Energy management
- Benchmarking
- Energy monitoring and metering



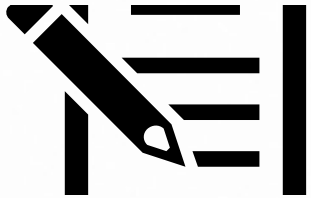
PLANNING

- Asset Surveys
- Screening assessments
- Feasibility Studies
- Business Case Development



IMPLEMENTATION

- Concept design development
- Tender support – RFP preparation
- Technical design adviser
- Project Management



MONITORING & OPTIMISING

- Metering & monitoring systems
- System fine tuning

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Key take aways

Integrating sustainability into core processes boosting competitiveness and innovation.

● WHO WE SUPPORT

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04

EVERY DECISION CAN IMPACT THE NEXT 20 YEARS

Decisions needed every 2 years. The results can impact the next 20 years. Don't build in poor performance

05

START SIMPLE WITH AN ASSET REGISTER

Understand the key assets, their age, cost and depreciation. Plan for when major works are needed.

06

INTERROGATE CURRENT PERFORMANCE & TRENDS

Review supply and demand profiles. This can highlight additional benefits and savings opportunities.

07

ASSESSMENT CRITERIA THAT MATTER TO YOU

Utilise assessment criteria that are unique to you and your goals. Use relevant metrics to assess options.

08

MAKE FINANCIAL METRICS WORK FOR YOU

There are lots of different financial metrics. Utilise those which best support your business case.

09

PREPARE FOR PROCUREMENT & NEXT STEPS

Planning is key to unlocking the next stages. There are several more stages that are needed to unlock savings.

10

WE ARE HERE TO HELP!

Experise across the Food and Drink sector. From opportunity identification to turn key solutions.