Net zero implementation support Scope 1 and 2 emissions

Independent, client-side project development and management

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Net zero

Why an optimal implementation plan is necessary

Achieving net zero requires simultaneous attention to multiple pillars; developing and executing a successful implementation plan requires breaking down the complexity to manageable components. A successful implementation plan results in building resilience, critical milestones and targets being achieved.

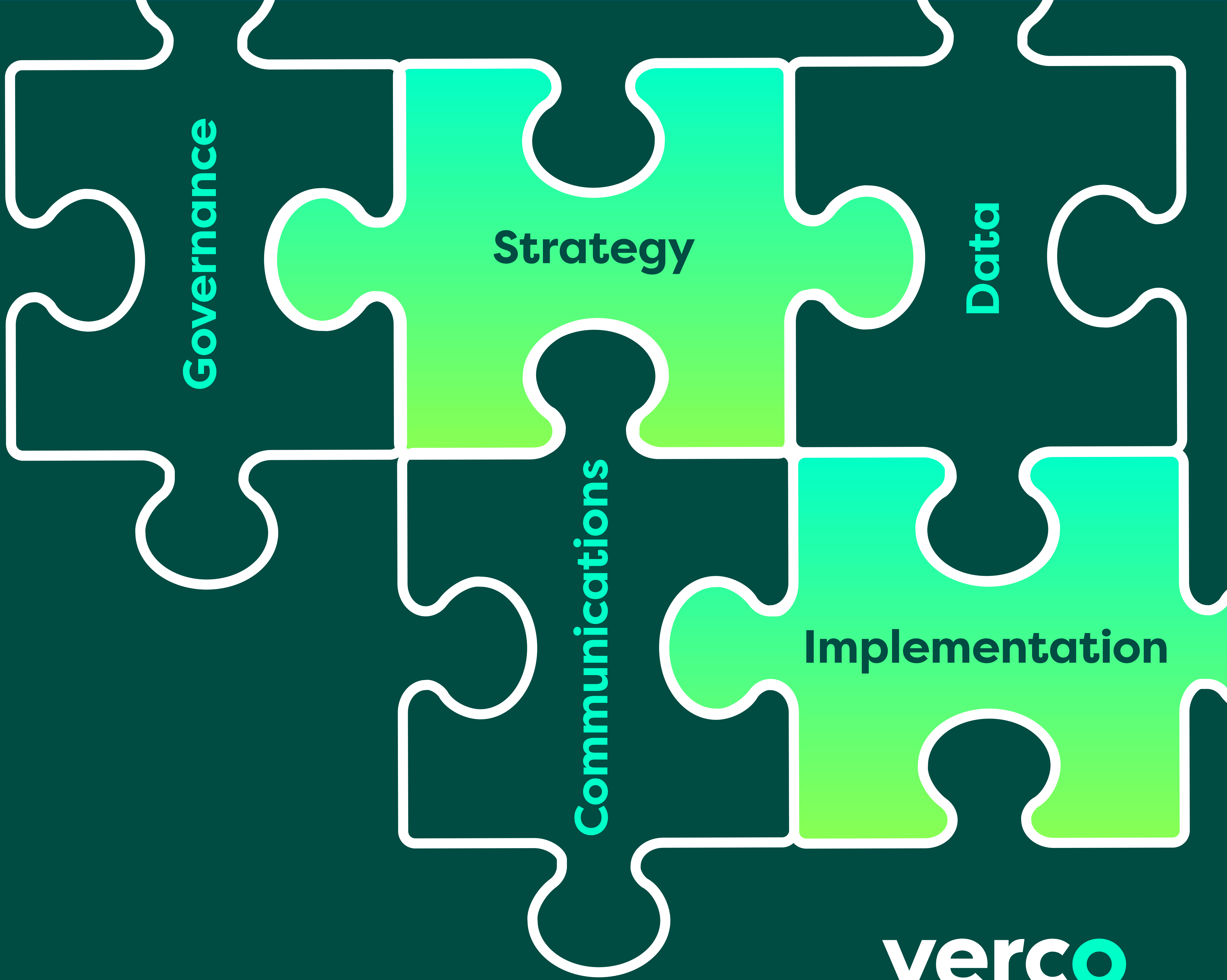
A successful implementation plan focusses mainly on two of the five pillars for effective net zero implementation:

Strategy

- Options assessment and strategy development
- Set objectives and priorities

Implementation

- Financial planning
- Project management



Net zero support of your site

Our experience shows that optimal implementation processes are founded on technically and commercially robust roadmaps supported by market-insightful, detailed plans.

We use our wealth of project experience to develop a tailored plan with your teams. Our advice is independent and so will be based on your needs and objectives.

Roadmap development

Quantified opportunity list from onsite visits
Review/ gap fill existing plans
Technology assessments (e.g. thermal decarbonisation)

Detailed planning

Detailed activity plans for each site
Critical decision pathways
Identify best delivery methods and resources

Implementation

Feasibility and IGAs for projects
Technical specification and procurement support
Supplier sourcing and engagement
Independent technical due diligence
Client-side programme management support
Monitoring and verification

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01. Roadmap development

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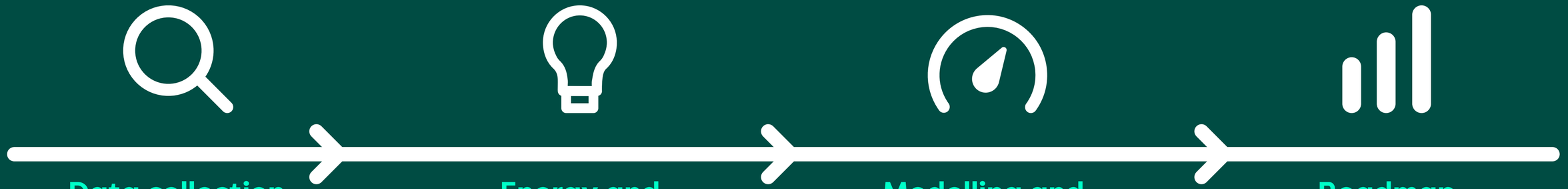
Roadmap development steps



Data collection and baselining

Understand key business drivers

Organisational/ stakeholder mapping

Review current plans and identify key intervention points

Energy and technology assessment

Onsite resource efficiency deep dive audit

Demand reduction opportunities

Evaluation of low carbon/ renewable technologies

Modelling and scenarios

Population of net zero navigator model

Develop business as usual and decarbonisation scenarios

Identification of likely residual carbon and offset approach

Roadmap development

Risk review and prioritisation

Costed low/ medium/ high scenarios for decarbonisation

Identify key decision points/ tipping points that may impact future strategy

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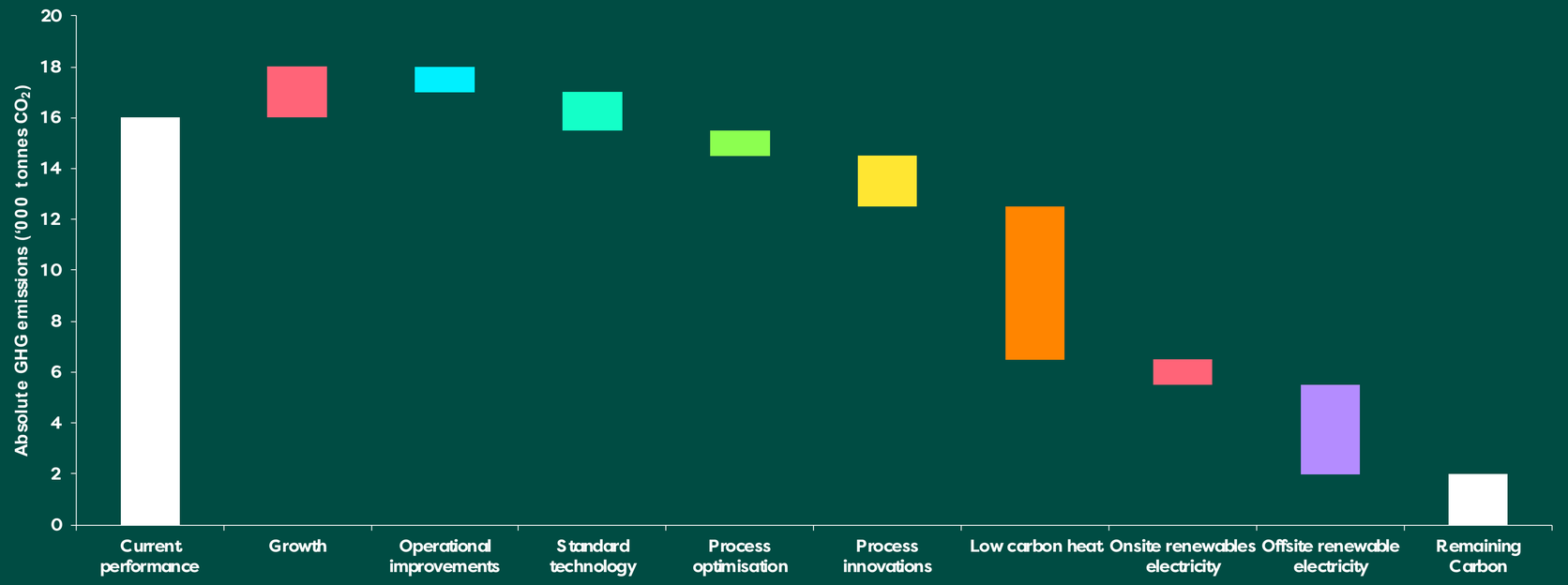
The roadmap will need to consider all types of interventions



Carbon (tCO_2e)	+2050	-980	-1470	-1030	-2080	-5930	-1020	-3410	206
CAPEX (k$)		80	360	240	1,100	3,600	480	0	0
OPEX (k$)		-120	-190	-140	-280	-50	-80	+240	+600

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02. Detailed planning

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Detailed planning steps

Workshops with key stakeholders

Technical workshop to agree on interventions identified in roadmap and asses their status.

Management workshop to agree KPIs and monitoring approach.

Development of critical decision flows

For the highest impact opportunities, Verco will develop a decision flow. This highlights key decisions and when they need to be made in order to deliver the plan.

Identification of best delivery approach

Working with key stakeholders, Verco will develop a plan for implementation of each opportunity. This will consider how a project is financed and the resources

Development of action plan

Development of rolling 3-year plan outlining what projects need to be installed by when.

The plan will also consider resourcing requirements and when enabling/ feasibility work will need to be completed to ensure plan delivery.

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Critical decision flows

Purpose

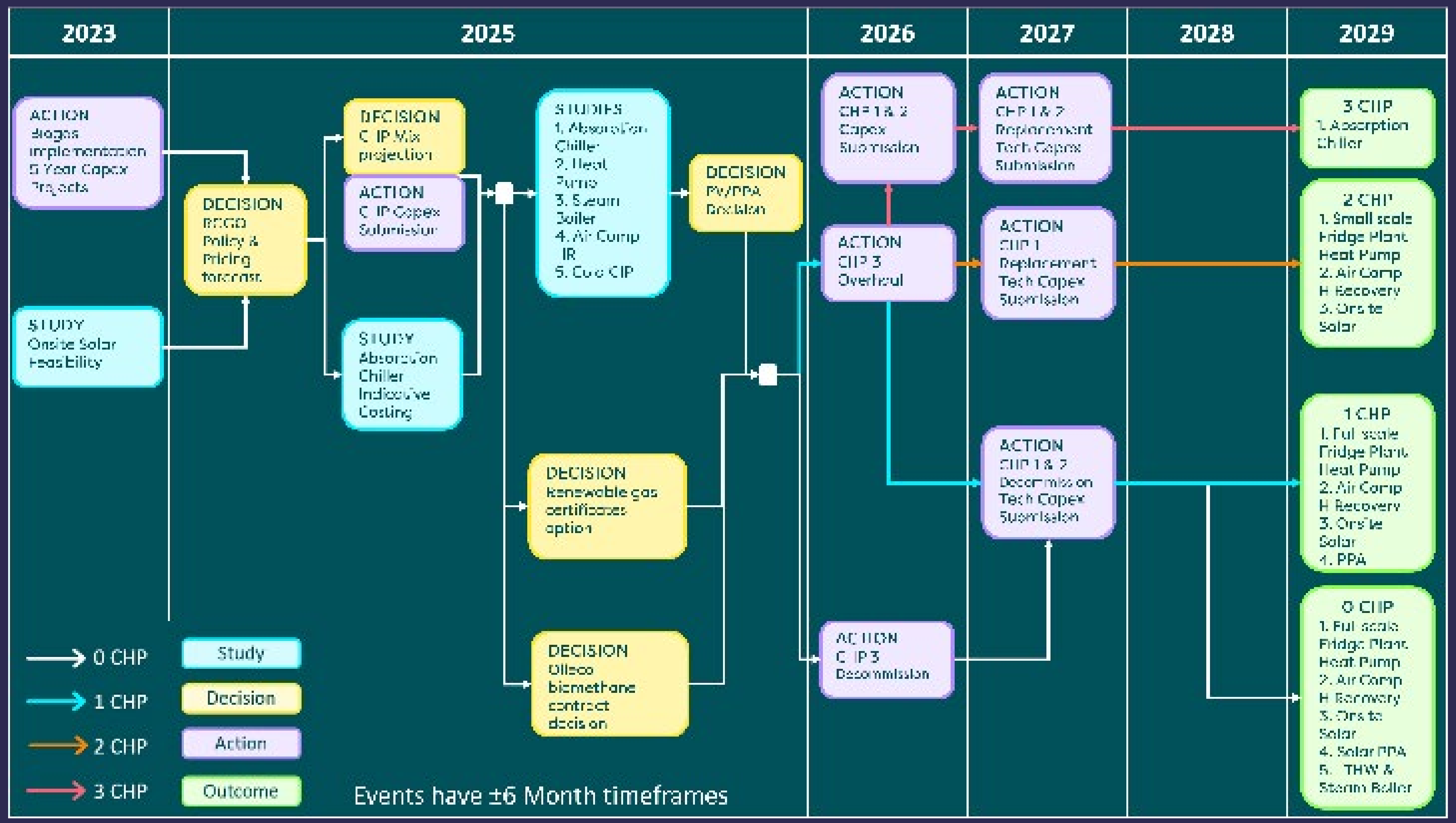
- Short- and medium- term decision making needs to be aligned with the long-term strategy.
- Uncertainties over the long-term solution can lead to inaction and a failure to take the necessary interim steps.
- No-regret actions need to be completed first.

Process

- Hold focussed workshops with key site and group decision makers to develop strategy.
- Embed market developments and key local drivers to costed decarbonisation pathways.

Outcomes

- Simple and clear, target-driven decarbonisation delivery strategy
- Decision gateway and no-regret action planning.
- Annual review programme to align latest developments.



Site plans

Purpose

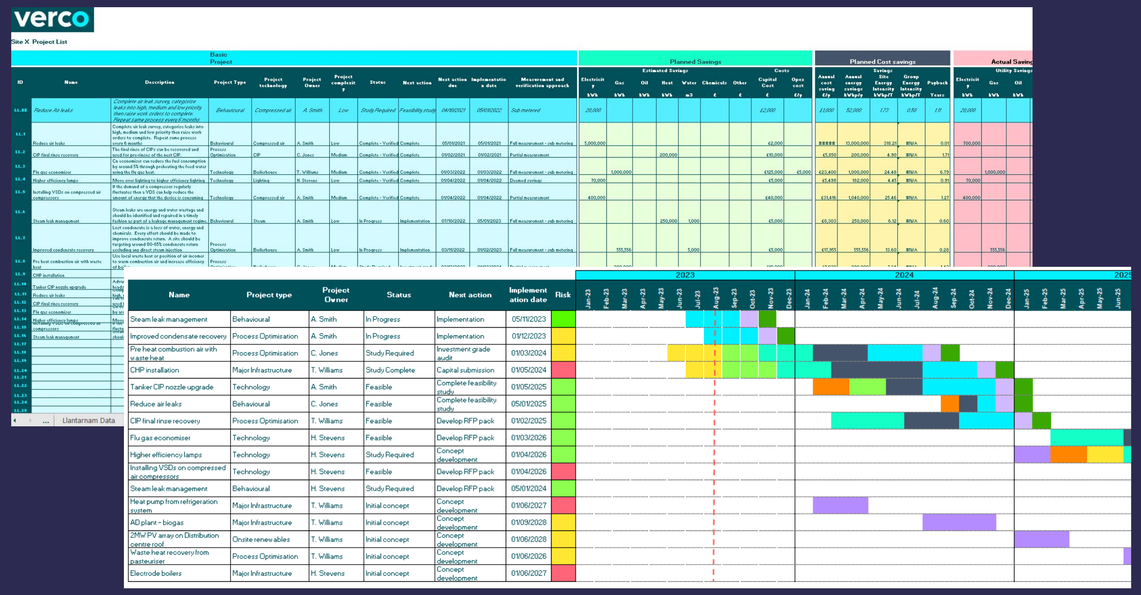
- To ensure that the enabling work for long-term solutions is done alongside the implementation of short-term projects.
- To ensure the site have a clear direction for project development and implementation.

Process

- Set out a recommended plan working backwards from the achievement of targets.
- The plan triggers project development and enabling activities that need to be completed for future targets to be met.

Outcome

A clear, time-bound, project plan for each site with assigned responsibility, status of projects and next action detailed.



Name	Project type	Project Owner	Status	Next action	Implementation date	Risk
Steam leak management	Behavioural	A. Smith	In Progress	Implementation	05/11/2023	
Improved condensate recovery	Process Optimisation	A. Smith	In Progress	Implementation	01/12/2023	
Pre heat combustion air with waste heat	Process Optimisation	C. Jones	Study Required	Investment grade audit	01/03/2024	
CHP installation	Major Infrastructure	T. Williams	Study Complete	Capital submission	01/05/2024	
Tanker CIP nozzle upgrade	Technology	A. Smith	Feasible	Complete feasibility study	01/05/2025	
Reduce air leaks	Behavioural	C. Jones	Feasible	Complete feasibility study	05/01/2025	
CIP final rinse recovery	Process Optimisation	T. Williams	Feasible	Develop RFP pack	01/02/2025	
Flu gas economizer	Technology	H. Stevens	Feasible	Develop RFP pack	01/03/2026	
Higher efficiency lamps	Technology	H. Stevens	Study Required	Concept development	01/04/2026	
Installing VSDs on compressed air compressors	Technology	H. Stevens	Feasible	Develop RFP pack	01/04/2026	
Steam leak management	Behavioural	H. Stevens	Study Required	Develop RFP pack	05/01/2024	
Heat pump from refrigeration system	Major Infrastructure	T. Williams	Initial concept	Concept development	01/06/2027	
AD plant - biogas	Major Infrastructure	T. Williams	Initial concept	Concept development	01/09/2028	
2MW PV array on Distribution centre roof	Onsite renewables	T. Williams	Initial concept	Concept development	01/06/2028	
Waste heat recovery from pasteuriser	Process Optimisation	T. Williams	Initial concept	Concept development	01/06/2026	
Electrode boilers	Major Infrastructure	H. Stevens	Initial concept	Concept development	01/06/2027	

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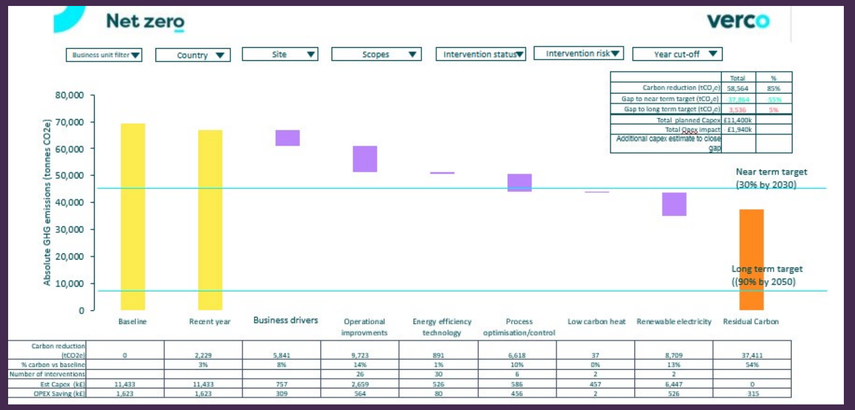
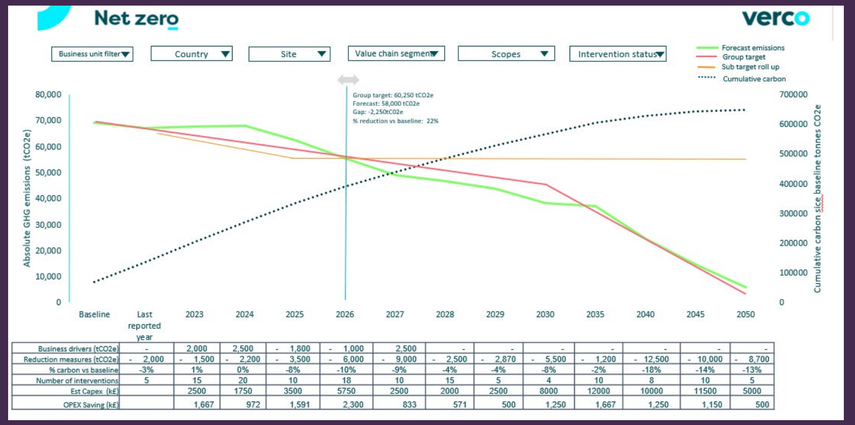
03. Implementation

Implementation programme management

We provide an all-round, tool-supported, programme management service:

- Maintenance of up-to-date site implementation plans (typically on a quarterly basis).
- Provision of a dashboard view to show current glidepath for each site and group considering current reduction plans and production forecasts.
- Annual strategy review to confirm that the long-term reduction strategy is still optimal for site.
- Project development support tailored to project maturity.
- Client-side project management of rolling 3-y CAPEX plan delivery.





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Tackle the net zero delivery challenge with our value-add approach

Detailed planning

Prioritise known projects

We optimise the project bundle so delivery aligns to your budget cycles and detailed plan.

Project development

Manage the design

We write specifications, source providers and present you with the optimal solutions for each project.

Evaluate and procure

We develop investible business cases and support your procurement team throughout the tendering and selection process.

More detail on project development

Delivery and verification

Facilitate, monitor and verify

We monitor the installation and verify the results.

More detail on delivery and verification

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How we support your project development

Concept development

Outline of opportunity and key members of influence by internal department.

Selection of team to develop project to implement.

Project charter development.

Outcomes:

Project charter sign-off

Feasibility budget approved (if required)

Project maturity class: 5-4

Project cost accuracy: +/- 50%

Specification

Understanding draft key technical areas of project for suppliers to achieve.

Data aquisition and key baseline analysis.

Technical specification development.

Outcomes:

Specification draft

RFPs issued to potential supplier

Project maturity class: 3-2

Project cost accuracy: +/- 30%

CAPEX submission

Business case development against client KPIs.

Evaluating supplier responses and project risk management.

Investment grade proposal development and evaluation of proposals.

Outcomes:

Business case submission

Capital submission

Project maturity class: 2

Project cost accuracy: +/- 10%

Supplier selection

Commercial and technical due diligence.

Assessment of key performance criteria adherence.

Support of supplier interviews.

Outcomes:

Selection of implementation partner

Project maturity class: 1

Project cost accuracy: +/- 5-10%

How we support your project delivery

Project delivery

Contractor due diligence advising on the fulfilment of technical criteria.

Facilitation of installation process.

Outcomes:

Project delivered to specification.

Project alignment with decarbonisation strategy.

Post implementation

Post installation benefit analysis.

Fulfilment of M&V plan.

Ongoing support to maintain utility savings.

Outcomes:

Benefits outlined (output of M&V plan).

Lessons from project captured for replication across client operations.

Verco supports clients in a client-side Technical Advisor role:

Monitoring contractors are adhering to technical criteria highlighted in project development.

Maintenance of up-to-date site implementation plans (typically on a quarterly basis).

Annual strategy reviews to confirm alignment with net zero target trajectory.

Case study:

net zero delivery support for major dairy manufacturer

Verco has supported a major dairy manufacturer with energy and carbon management for more than 10 years.

Flagship net zero dairy site support

Developed zero carbon strategy for world's largest fresh milk dairy and support with the procurement of major contractors to design, build and operate the mechanical and electrical systems at the site including CHP (4MW), PV (500kW), and Anaerobic Digestion (500kW biogas) for effluent treatment.

Developed technical specifications, supplier selection criteria and supported the entire procurement process from start to finish.

We have an ongoing role monitoring the performance of the energy services at the site and have supported the procurement of 20MW of low carbon generation at the client's other UK sites.

Helped the client secure >£10m and procure a partner for a merchant AD facility (15MW) on the site with a PPA and green gas offtake agreement.

Key outcomes

- Net zero carbon target achieved in operation for dairy due to successful delivery of strategy.
- All components of the strategy are making a positive contribution to the operating margins of the dairy with significant reductions in utility costs compared with the business-as-usual base case and other similar facilities.

Other projects

- Global roll out of Carbon Desktop energy management and reporting software
- Detailed process heat mapping and opportunity identification studies at UK sites
- Implementation of energy reduction projects (EC condenser fans and Vacuum pump upgrades)
- Implementation of automatic data solutions at all UK sites and 3 sites in Sweden and Denmark
- Delivering onsite and remote energy management support services at UK sites

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Together let’s achieve zero

Find out more

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