L•A•S•E•R ZERO CARBON FUTURE | apse

From Data to Action

A showcase of Rother Council's decarbonisation journey

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laserenergy.org.uk

Our Structure

Commercial Services Group

Professional Services

IT Solutions
- Cantium

Legal Services
- invictalaw

Education Services
- THE EDUCATION PEOPLE

Global Education Supplies
- KCS
- ces

Strategic Services

Energy & Carbon
- L•A•S•E•R
- lumina
- ZERO CARBON FUTURE

Procurement
- KCS procurement services

Recruitment – Managed Services
- connect kent
- connect hampshire
- Connect2Luton
- Connect2Surrey
- Connect2Dudley

Recruitment – Consultancy
- connect staff
- connect socialwork
- Commercial Services Group Interim & Executive Search

Community Services
- Landscape Services
- Commercial Services Group Managing Waste

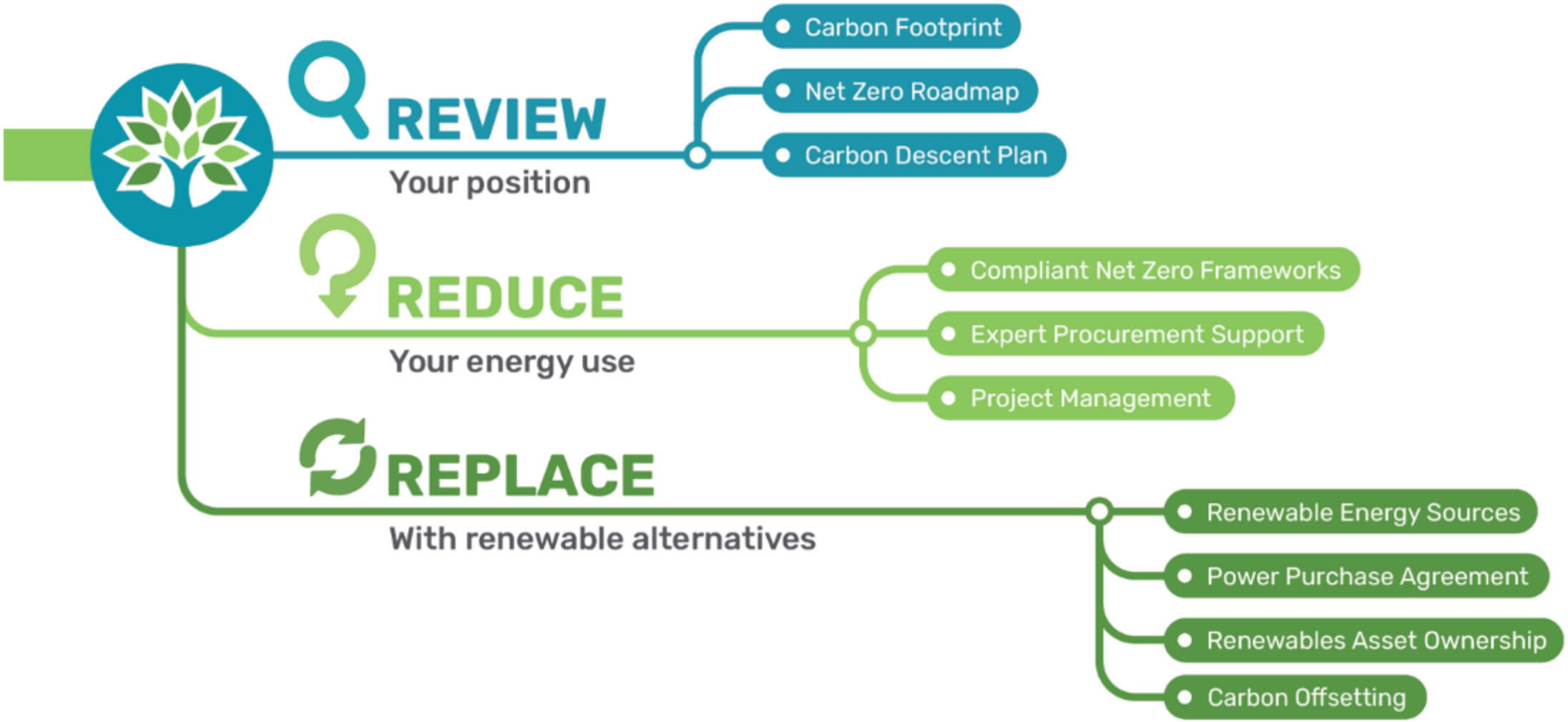
HR Services

Integrated HR Solutions
- HRConnect
- HRConnect EmploymentCheck
- HRConnect StaffCareServices
- KENT-TEACH.COM

About us

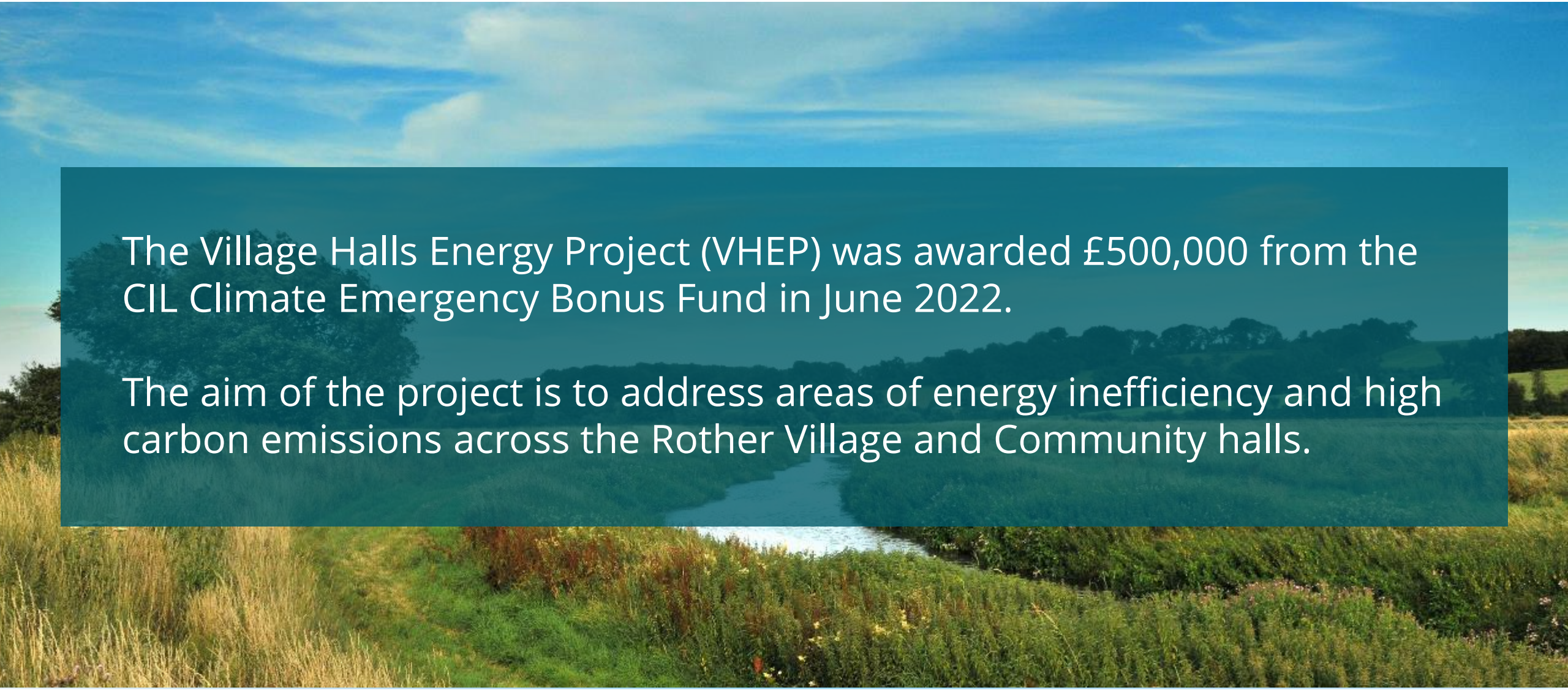
History	Team of experts	Track Record	Net Zero Mission
• Formed in 1989, **30+ years experience** of energy procurement & energy management • Compliant frameworks for the public sector • Work with over 200 public sector bodies	• **Over 120 people across a range of specialisms** • Energy procurement, customer services, billing services, energy management, reporting, net zero	• >£1.2bn per annum energy procured • >80,000 meters • **>£300M savings delivered** v market average through procurement • Additional through energy saving and bill validation services	• Focus has evolved towards net zero • Frameworks and services developed to **support Local Authorities with the end to end journey**

About us - LASER



Rother Council & LASER

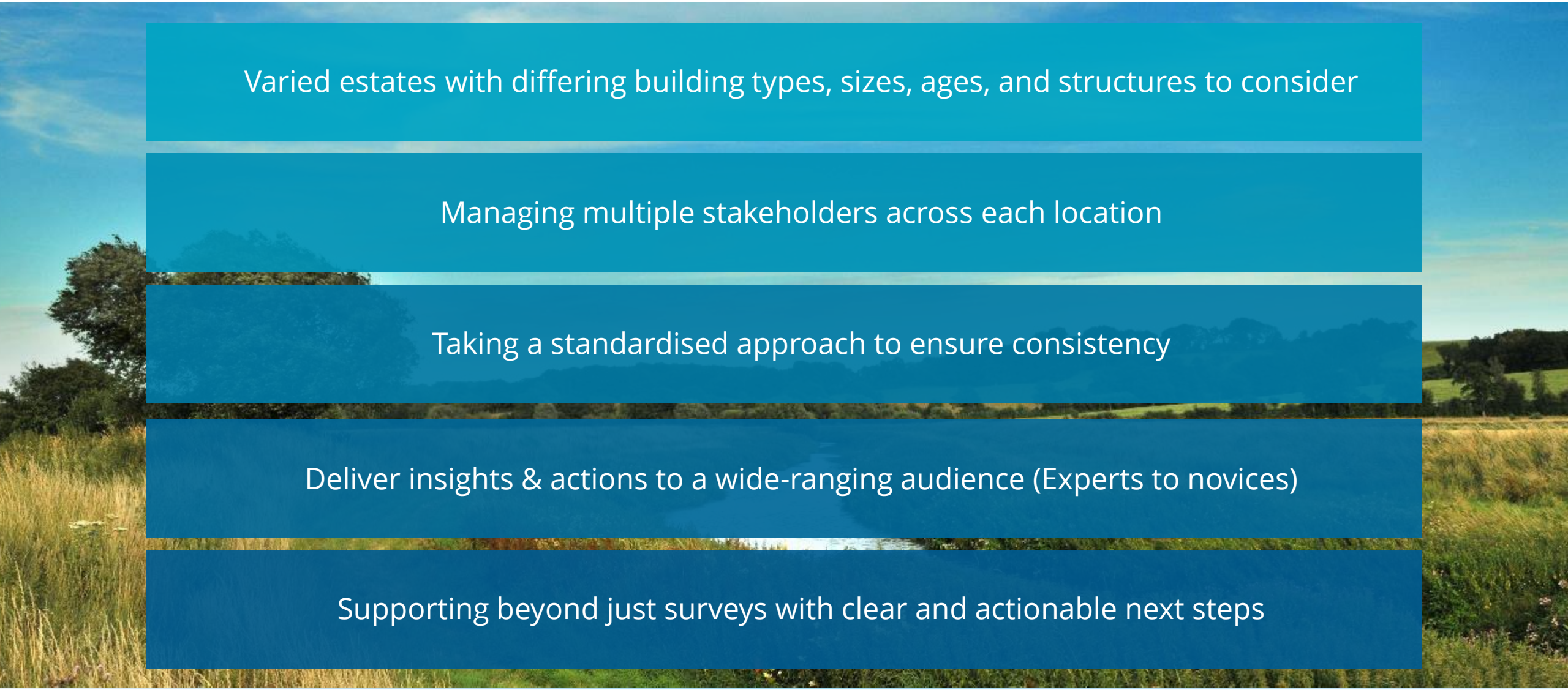
The Project



The Village Halls Energy Project (VHEP) was awarded £500,000 from the CIL Climate Emergency Bonus Fund in June 2022.

The aim of the project is to address areas of energy inefficiency and high carbon emissions across the Rother Village and Community halls.

The Challenge



Varied estates with differing building types, sizes, ages, and structures to consider

Managing multiple stakeholders across each location

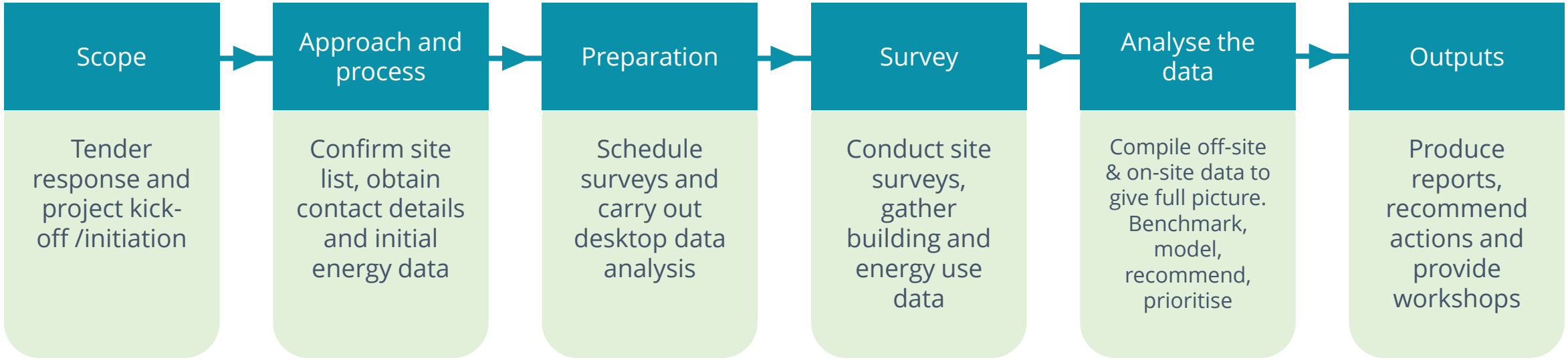
Taking a standardised approach to ensure consistency

Deliver insights & actions to a wide-ranging audience (Experts to novices)

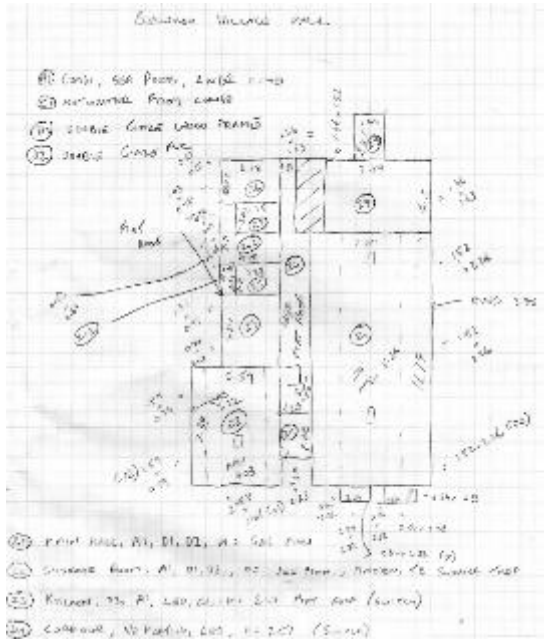
Supporting beyond just surveys with clear and actionable next steps

Our approach

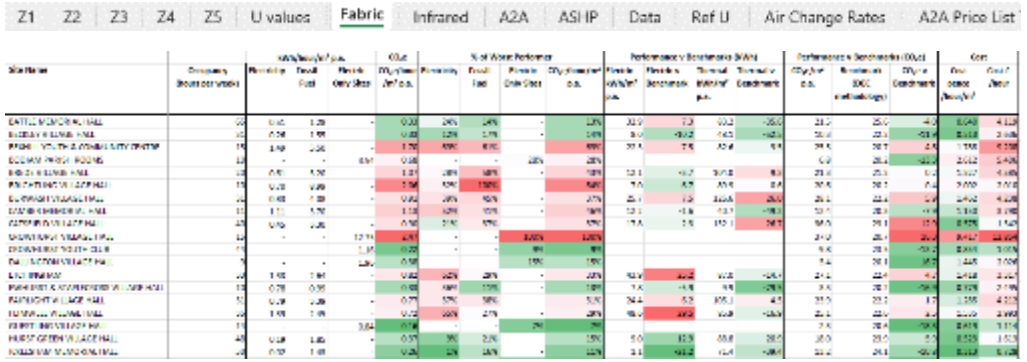
We took a methodical approach to tackling the challenge, breaking it down into a clear and simple process.



The Data



Site Name	Guestling Village Hall
Roof covering and type	Slate / small clay tiles
Orientation and pitch	South and west at approx. 30 degrees
Modules	10 x 425W Modules
System size	4.25 kWp
Solar output	Approx. 3,825 kWh per annum
Approx install cost range	Between £5,000 and £6,000 Assume £5,500 for calculations
Energy consumed on site	2111 kWh
Potential savings p.a.	On site savings - £610 Export revenue - £95 Total Savings - £705
Approx financial payback	7.8 years



BATTLE MEMORIAL HALL			
Utility	**Energy (kWh)**	**Cost (£)**	**Carbon ($kgCO_2e$)**
Electricity	21,194	8,138.42	4,098.5
Natural Gas	53,562	5,784.69	9,777.2
Total	74,756	13,923.11	13,875.7
Proportions			
Electricity	28% / 72%	42% / 58%	30% / 70%
Natural Gas			

Table 2.1. Site energy use, cost and emissions

Criteria	RAG
Appropriate area available for EVCPs and spaces	
Cable route - length of run and terrain	
Existing supply (fuses, 3 phase/single phase, earthing)	
Site EVCP suitability rating	Very Good

Table 4.1. EVCP Suitability Assessment

The Delivery

Village Halls

Prior to issuing the reports, RDC ran a workshop where context was given to the Village Hall stakeholders.

LASER explained the approach, technologies, and how the reports would be presented for easy interpretation. Great engagement and RDC received amazing feedback from this event.

RDC

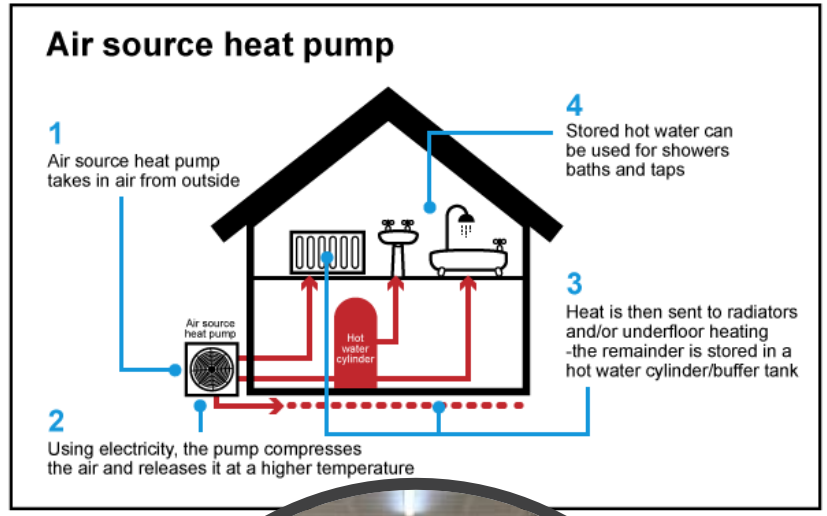
The sites were provided with simple, site-specific data however RDC required more detailed, overarching information. This included:

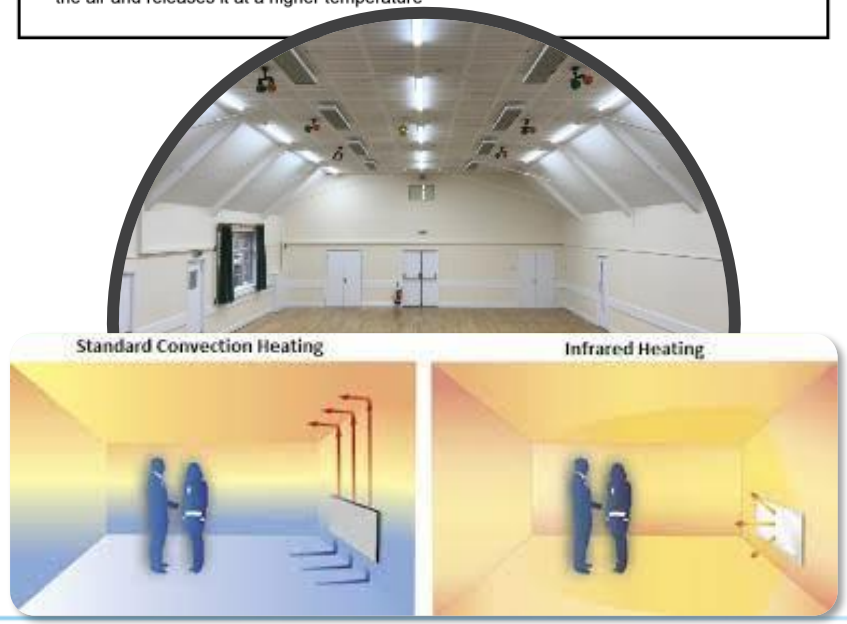
- A detailed benchmarking report to allow comparison of sites' current consumption and performance.
- A summary of all recommendations for prioritisation by different criteria.
- Solar PV details and analysis for consideration

Technologies

A wide range of technologies and recommendations were included:

- Metering and data collection improvements
- Control adjustments and enhancements
- Building fabric improvements
- Lighting upgrades
- Solar PV potential, additional analysis (generation v consumption), battery potential
- Low carbon heating systems/ASHP and infra-red
- Suitability for an EVCP installation
- Rother to review all recommendations to prioritise action and funding





Outputs

Through our surveys, we were able to identify a set of recommendations based on ‘real’ data to help Rother Council take steps towards Net-Zero.

The key outputs:

1. Site-specific reports

- Benchmarking, performance and recommendations
- Metering and wiring, site condition
- Aimed at Trusts to advise and inform on next steps

2. Full all-sites report

- Greater detail e.g. on solar, options such as battery
- Complete set of recommendations Including other RDC info
- Benchmarking and prioritisation (words and numbers)

How can LASER help?

For us, the surveys are just the start of the process.

Procurement and Installation makes the savings!

We manage Compliant Frameworks with option to self-serve or Managed Procurement.

Site surveys and modelling	Supply chain / lifecycle analysis
Education and communication programmes	Financial / legal advice
Grid connection and renewables consultancy	Vehicle fleet low carbon alternatives

Heat pump systems	Combined Heat and Power	Hydro power
District Heating schemes	Battery Storage	HVAC System Upgrade
Heat metering for District Heating	Building Management Systems	Site level Smart grid
Rooftop Solar PV	Biomass heating	Virtual power plant technologies
Ground mounted solar PV farm	Insulation of buildings and pipework	LED Lighting
Solar Thermal heating systems	Anaerobic digestion	Hydrogen systems

Top tips for project delivery

- **Push forward with your Net Zero plans –** Climate change is urgent and there is some funding around now.
- **Preparation is key** – quality data, reliable costs estimates, funding bids, know your procurement route and supply chain risks, ensure resource to manage.
- **Pick a trusted partner –** Complex projects require expert partners. Work with someone who understands your requirements and can deliver a compliant route for you to achieve your goals

Contact us if you have any questions

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Visit our website:
laserenergy.org.uk