Unlocking energy, water and decarbonisation opportunities

Verco's Deep Dive approach



The story so far...

The approach

'Deep Dive' is a term we use to describe a specific type of energy decarbonisation or water efficiency study we deliver, typically for processing or manufacturing industries. The aim is to propel clients towards their energy reduction goals by suggesting ways they can maximise the efficiency of their utilities.

Verco's expertise

We've been conducting Deep Dives for over 20 years. Our team has conducted more than 50 detailed energy and water audits for sites in more than 20 countries. We are well acquainted with best practice and innovation, so can pass that expertise on to those we work with.

Success stories

Taking breweries as an example, the average energy reduction opportunities identified for Verco clients are 30-45%. Potential cost savings often exceed >\$10 million per annum. These are split between operational improvements, process changes and the implementation of new technologies.

Read the case study to find out more



A deep dive into Deep Dives

Cost

The typical cost of each Deep Dive study is ~£50k depending on the size and location of the site.

Payback

Following successful implementation of opportunities, documented payback period is <2 months.

Objectives

O1. Produce a clear actionable plan of quick win energy reduction projects to generate attractive financial returns.

02. Prioritise and communicate list of high impact energy and carbon reduction projects for site teams.

03. Develop a risk-reviewed and high-level costed concept for optimal heat integration to enable decision making at site, zone and group level.

Principles

Inclusive engagement across all levels

From operators and team leaders to zone leaders, we involve the full site team. This ensures everyone is aligned and empowered to contribute to energy reduction efforts.

Challenging the status quo

Many practices persist out of habit; Verco applies cross-industry expertise to introduce smarter, energy-saving controls.

Encouraging cross-department collaboration

We promote interdepartmental teamwork to unlock opportunities like heat recovery, which often depend on co-ordinated efforts across sites.

Sharing innovation and connecting with industry leaders

Deep Divers connect site teams with leadership, fostering strategic alignment and long-term strategic thinking.



Our tried and tested approach

Each Deep Dive follows the below typical structure:

Workstage

Kick off & mobilisation

Initial data collection and analysis

Pre-visit department calls

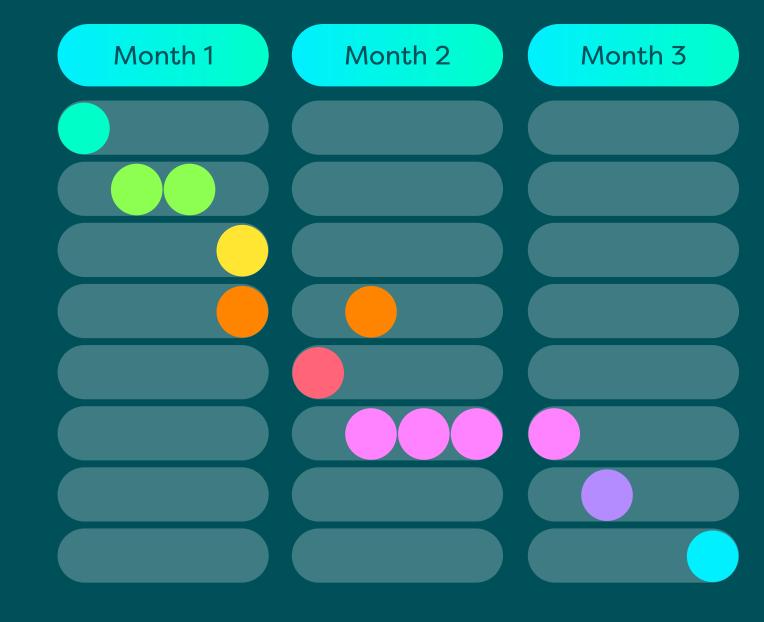
Development of balance

Site visit

Write up

Issue navigator & feedback presentation

Monthly follow-on support calls



Support needed for a successful Deep Dive:

We know from experience that better engagement and participation achieves stronger outcomes for all stakeholders.

Site

- Engagement from all key departments
- Prompt provision of data prior to site visit
- Resource to readily implement quick wins following site visit

Zone

Support (onsite or remote) to set context for the study and facilitate the visit.



Benefits at all levels

The benefits of the project are realised across site, zone and group levels.

Site

- A list of high priority quick win items provided at the end of time on site.
- Reduced OPEX savings via opportunity implementation.
- Identified process optimisation opportunities and developed an understanding of where else they have been successfully implemented.
- Clear understanding of key data/ metering gaps needed to drive optimisation.
- Training and familiarisation with energy saving concepts and Verco benchmarks.

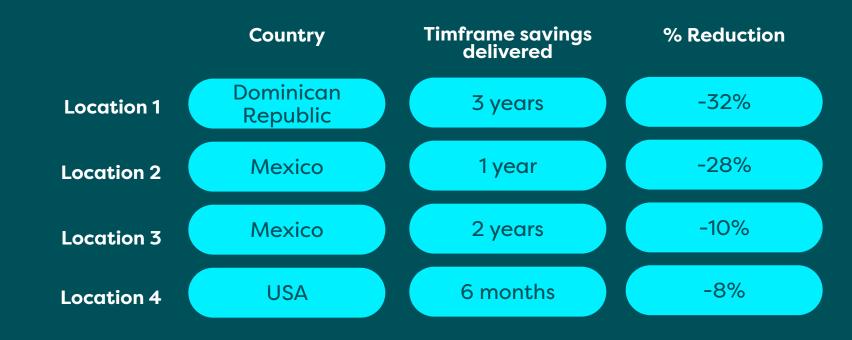
Region

- Aligned energy action plans between site and zone allowing clear progress tracking.
- Tailored low-carbon energy supply options appraisal.
- Cross-site opportunity sharing and technical upskilling of zone team re. energy saving concepts.
- Training and familiarisation with energy saving concepts and Verco benchmarks.
- Ability to tailor the focus of the Deep Dive to site needs e.g thermal energy reduction or water optimisation. Focus on quick wins and future supply-side modelling.

Global

- Challenges identified and explored for wider relevance with potential innovation solutions discovered.
- Improved visibility of site performance.
- Calibrating the energy reduction strategy against a real test case.
- Optimising the site's demand profile to support new innovations and technology.

Here's an example of recent reductions achieved by Deep Dives:



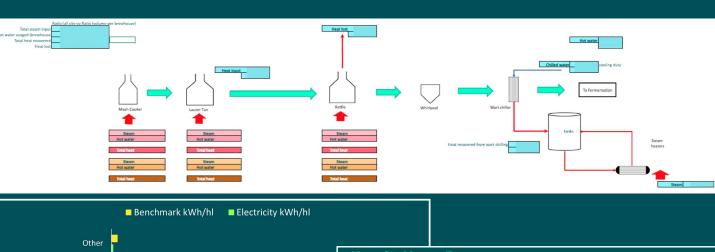


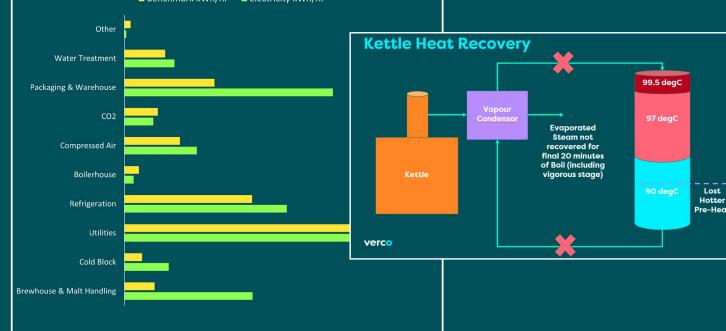
Deep Dive Navigator explained

Once we leave the site, the real work begins. Following each Deep Dive project, sites receive a tailored Deep Dive Navigator containing:

Analysis & modelling

Including bottom-up departmental energy balances, benchmarking, and future concept evaluations.







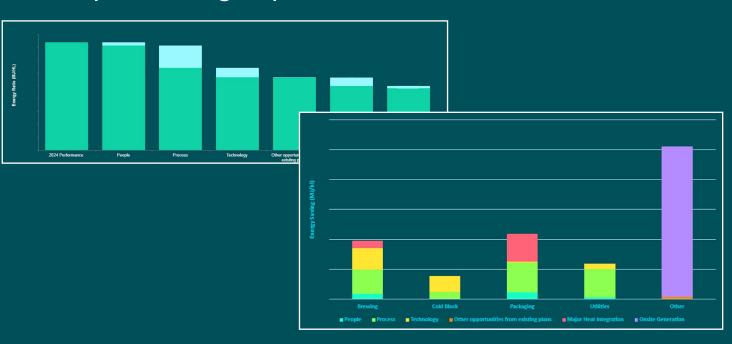
Opportunity calculations

Calculations with assumptions clearly shown (which can be updated by site teams if better information becomes available).



Summary pathway & management report

Outlining collated pathways, carbon reduction and net zero solutions. These are supported by a future concepts summary that highlights innovative solutions from within and beyond the industry, including key enablers and barriers.



Follow up support activities

Monthly calls to go through opportunities and provide insight and guidance to implement them.

Get in touch to find out more



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