



LONDON | LEEDS | PLYMOUTH

SERVICES OVERVIEW



Designing innovation with practical Engineering solutions

Introduction to CarbonPlan Engineering

CarbonPlan Engineering is a Mechanical and Electrical engineering consultancy serving the building industry. This service compliments the parent company CarbonPlan the sustainability consultancy providing consultancy services since 2006.

The main focus of the team is delivering a full range of building and auditing services designed to identify efficiencies and risks to enable financial costs and CO₂ savings to be minimised by our clients.

The services offered include:

Design Consultancy

- ❑ Mechanical and Electrical design – full and performance duties design service
- ❑ Sustainability and Energy Compliance services - Planning, BREEAM
- ❑ Modelling of building energy use – Dynamic modelling, Overheating
- ❑ Renewable Feasibility – Planning, Sustainability targets, Aspiration, Funding

Compliance Surveys

- ❑ Energy Savings Opportunity Scheme (ESOS) – Audits and Lead Assessor
- ❑ Air Condition Inspections (TM44)
- ❑ Energy Performance Certificates (EPC) – Lease/Renting markets, MEES, Planning, Part L
- ❑ Display Energy Certificates (DEC) assessments – Mandatory for Public building >250m²

Investment Decisions

- ❑ Acquisition surveys – Mitigating MEES Risk, Pre/Post Acquisition, Pre-Sales report to max asset value
- ❑ M&E Dilapidations and condition surveys
- ❑ Investment Grade Audits
- ❑ Funding Solutions

Once opportunities are identified CarbonPlan Engineering can design projects and provide full turnkey service through partnerships with installers. Overleaf is our service offering maybe our experience & how we add value.

For more information please email us at engineering@carbonplan.co.uk or contact Dan our Director directly:

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Mechanical & Electrical Design

CarbonPlan Engineering provide full duties design service through to enhanced performance specification service, to suit clients and project requirements. This is provided by our in-house team with an extensive range of commercial and public sectors project delivery.

Using the latest 3D design software and BIM modelling, we believe in an integrated approach to developing projects is an effective means of reducing risk resolving inefficiency and significantly improving operations all through the design phase.



Sustainability energy compliance services

Our accredited CIBSE Low Carbon Consultants provide a full suite of Part L compliance calculations for both residential and non-domestic projects. These include SBEM (Simplified Building Energy Modelling) and DSM (Dynamic Simulation Modelling) software for all non-domestic building types using IES modelling software.

We provide expert Part L (and Section 6) Building Regulations advice with regards to project compliance from pre-planning to post-occupancy. Our extensive experience allows us to engineer the most cost effective solutions for all projects.



Energy Saving Opportunity Scheme (ESOS)

ESOS places a requirement for ALL non SME's in the UK to undertake comprehensive energy assessments of their business operations. By 5th December 2015 you must have undertaken a comprehensive assessment of the energy used by all aspects of your business.

CarbonPlan Engineering offers an ESOS Building Audit service that is compliant with the requirements and very cost effective.



Acquisition Survey

CarbonPlan Engineering recognise the potential risk when purchasing properties and portfolios of property. There are two main areas here, the MEES (Minimum Energy Efficiency Standard) risk of the asset not achieving an E rating for the 2018 cut off and the M&E survey to determine the life cycle replacement of plant.

Time is of the essence when acquiring property and we have a team who can respond to client's time frames. CarbonPlan can deliver advice and funded solutions to ensure acquired assets do not become a liability.



M&E Dilapidations and Condition Surveys

We carryout M&E condition surveys of existing building for all types of buildings in the private and public areas. These identify where the building is not operating effectively or efficiently and allow clients to understand their risks and future costs.

We also understand the details of a dilapidation M&E survey for the private rented market and how negotiations to the end of a lease need to be agreed. **From April 2018 it will be UNLAWFUL to let properties with an EPC Rating of F or G. 1 in 4 buildings fall into this bracket.**



Renewable Feasibility Reports & Advice

We provide Renewable Feasibility reports for buildings and sites to determine the practicality, the payback periods, grants and funding options, that best suit the proposal. The need for Renewable Feasibility reports come from a number of drivers including:

- Compliance and Planning conditions for developments
- Aspirations such as BREEAM
- Energy, Cost and CO₂ savings for retrofit projects.

CarbonPlan also offer a suite of funded solutions that can ensure all the above drivers can be met for all budgets.



Air Conditioning Inspections

CarbonPlan Engineering has a team of qualified energy assessors that deliver mandatory periodic inspections that are required for all air conditioning systems with a rated cooling output of 12kW or greater. This includes the combined output of multiple units in a single building. The benefits of getting your air conditioning system inspected include:

- ❑ Comply with legislation & avoid non-compliance fines
- ❑ Identify opportunities for energy and cost saving
- ❑ overview of the condition & operational efficiency



Investment Grade Audit (IGA)

CarbonPlan Engineering provides consulting services to evaluate client needs and calculate the cost, benefits associated with upgrading and updating the electrical and heating systems within their facilities. Our Investment Grade Audits allow asset managers and owners make informed decisions and consider

- ❑ efficiency and asset management
- ❑ optimisation of services,
- ❑ predictive maintenance due to the age of their mechanical and electrical systems,
- ❑ Potential for Low and Zero Carbon technologies



Modelling of building energy

CarbonPlan Engineering utilise building energy modelling to improve building design, operation and target specialist issues such as diagnosing overheating problems. Our assessment:

- ❑ propose alternative design and ventilation strategies,
- ❑ explore potential improvement programmes and predict impacts to energy audits and energy performance prior to implementation
- ❑ compare against post-installation performance to assist with building lifecycle performance assessment.



Testimonials and Clients

A non-exhaustive of clients CarbonPlan have worked with over the years include:



Hampshire County Council

"It was a pleasure to work with Charles throughout our Energy Performance Programme. His professional and flexible approach coped well with the complexities of our work, he worked hard to understand our bespoke requirements and delivered to our demanding brief. Charles kept us very well informed throughout the project, and delivered on budget and to the agreed deadline."

Walsh Group

"CarbonPlan were great, excellent service, good value for money, and we are already seeing the benefits. The Environmental Management System helps us to identify our key environmental impacts and take the necessary steps to managing these in a way that minimises their effect on the environment and people. It also helps us to identify best practice and build this into our processes, enabling us to continually improve our environmental performance by bringing an intelligent and informed approach to sustainability on every project, as we have done with value and innovation"

London Borough of Hackney

"CarbonPlan undertook the initial scoping report investigating the feasibility of establishing a District Heat Network in Dalston Town Centre, Hackney. The extensive experience that CarbonPlan brought to the project delivered a detailed, comprehensive and above all pragmatic evaluation of the proposal and the extensive technical knowledge of their team provided significant value for money."

