



Client Case Study

The Port of Dover engages Beond to manage long-term energy & carbon strategy, saving £270,000 in the first year and £1.32m in total by implementing an innovative and dynamic strategy.

Our Client

The Port of Dover is Europe's busiest ferry port, a vital international gateway for the movement of people and trade.

It is also an award-winning cruise port, one of the busiest in the UK and hosts some of the world's most prestigious cruise lines. Other successful businesses include a cargo terminal, a top award-winning marina and several niche activities. The business mix is diverse.

The Port of Dover is seen as a brand of quality and importance and is a continually growing organisation, creating and supporting economic growth nationally and locally and working towards a more sustainable future for the local environment.

The Port is also committed to implementing its Environmental Policy in order to achieve its vision and mission and deliver a sustainable port operation for the benefit of current and future generations.



Beond

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**Pushing the
boundaries in
energy design**

Our Challenge

The Port of Dover invited Beond to tender for its consultancy services in 2016, within a competitive request for proposal for services. This involved setting out a proactive approach to understanding the specific needs of the Port's energy portfolio, recommending ways of overcoming legacy issues to deliver short-term goals and longer term environmental aspirations, driving down energy costs, reducing emissions and helping the Port to become smarter in taking a joined-up approach to energy matters.

Ultimately, the Port was looking for a long term beneficial partnership for all of its initiatives and projects relating to energy and Beond was delighted to oblige.

As a key Port in the UK, Dover recognises the importance of delivering value and is actively engaged in working towards a long-term objective to be a carbon zero Port. Therefore, whilst the cost of energy is a critical element of any strategy the Port was looking for a partner who was able to support more than just the purchasing of energy.

Traditionally the Port had secured long-term fixed price contracts for its electricity and gas requirements but had begun to consider the benefits and opportunities of a more dynamic flexible purchasing strategy.

The challenge set by the Port within the consultancy tender was:

- **To support the Port in understanding the transition from a fixed price contract strategy to a flexible price strategy and advise on the best approach.**
- **To consider how the Port has implemented solutions to reduce energy cost, emissions and improve security of supply.**
- **To work with the Port to deliver innovations in new technology and support the optimisation of existing equipment on-site.**
- **To provide services which deliver benefits now, alongside a longer term vision which can be adopted by the Port to ensure continued value.**
- **Comply and undertake full compliance with OJEU.**

Our Approach

Beond was instructed by the Port in late 2016, having demonstrated our values and proposed service partnership in a highly competitive tender which included major competitors. We were able to provide a service which aligned to the key objectives of the Port and offer a staged approach to delivering near and long-term benefits.

Between Beond and the Port of Dover we started with a detailed risk management workshop which established:

- **How the Port considered achieving its carbon zero target, including what had been considered to date and why decisions had been taken.**
- **How the overall Port estate had evolved and the plans for future changes to the infrastructure given the significant investment being taken at the Port.**

About Beond

With over **500** major energy consumers under our management we have an excellent track record in delivering measurable success.

£270,000

Saving in the first year of our Partnership

£1.32m

Total saving through implementation of strategy

1st

Beond selected through a highly competitive tender by the Port

100%

Coverage and support across entire energy spectrum

100%

Dedicated Account Management and Director level involvement

100%

OJEU compliant across all services

About Beond

Our team holds an average of **18-years** industry experience, benefitting our clients through our knowledge and insight.

The conclusion of this workshop enabled Beond to determine a structured plan for dealing with the immediate requirements (i.e. the procurement tenders) and how we would evaluate the longer-term requirements (i.e. capital infrastructure projects).

It was agreed that Beond would engage on phase 1 in the following areas:

- **Negotiate optimum supply contracts and agree a strategy for energy hedging over a 5-year horizon.**
- **Undertake mandatory carbon compliance services to ensure the Port remained compliant with legislation, including all EPC requirements.**
- **Undertake an OJEU compliant Solar PV tender to assess the optimum system and contract structure for roof-mounted Solar PV.**
- **Review further opportunities for on-site generation covering key technologies such as, Battery storage, Wave / Tidal and optimisation of the existing generator fleet with respect to the Medium Combustion Plant Directive and generator asset abatement.**
- **Support the long-term risk of legislative or regulatory change and help the Port adapt the strategy to consider change.**
- **Negotiate and support the contracting of gas-oil supplies to the Port including optimization of deliveries through a remote monitoring system to assess tank levels and consumption patterns.**
- **Working closely with the nominated DSR aggregator to support the on-going strategy for demand side management given changes to the legislation.**

All services have been conducted under our dedicated in-house OJEU team, providing compliant OJEU services to ensure compliance to regulations alongside an industry leading OJEU compliant software platform.

The Results

Beond completed a competitive OJEU compliant tender for the half-hourly, non-half-hourly (including P272 meters) and gas requirements. This concluded in:

- **Awarding a 5-year structured flexible product for the half-hourly & P272 metered volume to allow the Port to take advantage of wholesale market conditions and manage the risk of non-energy costs.**
- **Awarding a 3-year fixed price contract for the smaller non-half-hourly meters to provide certainty and security of cost.**
- **Awarding a 5-year fixed price contract for the gas meters which demonstrated significant value against other contract options.**

5-Year

Energy purchasing strategy under a dynamic flexible contract

30%

Potential savings from a compliant Gas-Oil tender and on-going delivery strategy

100%

Coverage of all available technology and efficiency options

100%

OJEU compliant Solar PV tender & consultancy service

1,561.41kW

Total size of 2 major Solar PV installations delivered through Beond's service

38

Number of interested suppliers during the Solar PV pre-qualification

Beond concluded a competitive OJEU compliant tender for the Port's **gas-oil requirements**, putting in place a more efficient contract with a new partner alongside a **delivery strategy which could reduce supplier costs by 30%**.

We are currently considering numerous on-site generation options for the Port by conducting full feasibility studies and working with various third party organisations to define the optimum strategy for emissions and cost reduction to help the Port meet its long-term emissions reductions target.

As an independent consultancy, we are able to advise on a full range of third party and emerging technologies and provide the Port with our unique insight and analysis to help build a considered and beneficial business case.

The Savings:

The initial conclusions from stage 1 of our long-term partnership enabled Beond to deliver:

- A **£270,000 reduction in cost** in the first year of our partnership.
- An overall project total of **£1.32m saved** by negotiating improved contracts, optimising volumes based on our forecasts in 2016 and delivering and advising on innovations.
- **100% compliance** with all mandatory requirements.
- The completion and award of **two Solar PV installations** on the Port to be completed in 2019, delivering:
- A **fully compliant OJEU tender** including **38 individual companies** during the Pre-Qualification and a high-level of negotiation to the final 3 bidders in a truly independent assessment of the PV sector.
- A **1,305.99kW roof-mounted PV system** on the new Refrigerated Cargo Terminal within the new DWDR project providing **580,545kg/yr CO2 savings**.
- A **255.42kW roof-mounted PV system** as part of the re-construction within the Eastern Docks providing **111,119kg/yr CO2 savings**.
 - A **£120,000 saving** vs. the initial quotes.
 - A **1.2-year improvement in payback** for the capital investment.
 - Improved system performance through a unique minimum system performance contract to ensure the PV continues to perform during its life.

Beond will continue to support the Port in meeting and optimising their current and future energy and emissions exposure as they face challenges from the ever-changing markets.

For further information about any of our services please call Beond on 0208 634 7533 or email info@beondgroup.com

About Beond

Our software and our people have won numerous industry awards, providing our systems & people are at the forefront of the sector.

£120,000

Saving on Solar PV capital investment vs. initial quotes

1.2-Year

Improvement on capital investment payback through Beond's tendering of the Solar PV

691,664

kg/yr CO2 savings annually forecasted through the Solar PV

100%

Compliance to all mandatory schemes

100%

Active partnership, ensuring the Port remains at the forefront of innovation

100%

Supported by our unique and awardwinning software