

Appendix A

Energy Purchasing Strategy for 2012-16

Management summary

Buying energy is a complex activity. The market is volatile and purchasers must balance the desire to minimise the price paid with an appropriate level of risk. Purchasing in advance of the period of use fixes the price, at the cost of a risk premium of up to eight percent. Purchasing during the period removes the risk premium but leaves the purchaser open to the volatility of the market – which may have risen by more than the risk premium by the time of purchase. Better prices can be achieved by purchasing as much as possible of the energy as base load (as oppose to peak). All these factors can be better managed by a purchaser who is buying large volumes. The LEP (London Energy Project) was established in 2006 to give guidance to public sector organisations buying energy. LEP recommend the use of the framework agreements established by LASER (Kent County Council) and GPS (Government Procurement Service – formerly Buying Solutions). The LEP recommendation is on the basis of a detailed study carried out by the Cabinet Office that shows LASER and GPS performance over a two year period to be very comparable – and that both significantly outperform their nearest rivals. In the absence of its own expertise in energy purchasing Harrow Council followed the LEP recommendation and currently purchases its energy under the LASER agreement. The LASER and GPS data provided by Cabinet Office has been reviewed and supports the recommendation to continue using the LASER framework.

1. Introduction

This document is the Harrow Council purchasing strategy for the purchase of energy (gas and electricity) for council buildings and schools. The existing contract users the LASER framework agreement that was let 4 years ago (October 2008). With a couple of exceptions all the London Boroughs purchase their energy under the LASER agreement. The existing contract covers energy provision until the end of September 2012. Currently a portion of the Council's energy is purchased in advance of the usage period. In order to ensure continuity of this advanced purchase the new contract needs to be in place as soon as possible. Ideally the contract would be in place from 1st October 2011, however the LASER team have

stated that some delay will not prevent Harrow from participating. They did not state a drop dead date after which participation is not possible, however it is clear that more than a short delay will have this result.

This strategy deals solely with the purchase of energy i.e. the supply side of the Council's energy use. It is recognised that there is considerable scope to reduce energy use (demand) by the adoption of energy efficiency measures etc. Options for reducing demand are considered elsewhere.

The procurement strategy begins by explaining the existing situation and lessons learned from it. It then describes the scope of the new procurement, the council's business requirement and summarises the council's ongoing review of the energy marketplace. It also covers procurement options appraisal, choice of procurement route, and the procurement program. Other more project-based issues are also covered where they are likely to impact on the procurement, such as risks, budget, and dependencies etc. The purpose of this is to ensure the successful management and delivery of the new contract throughout its lifetime.

2. Current Situation

Harrow Council's energy bills for corporate buildings, schools and other buildings are currently approximately £5m per annum. The council procures the vast majority of its energy requirements centrally under a framework agreement managed by LASER (a Central Purchasing Organisation). Under the current framework agreement gas is supplied by British Gas to the Council and electricity by NPower. The LASER framework was established using an OJEU compliant process. The present arrangements commenced in October 2008 and continue until September 2012. Expiry of the current contract is the driver for establishing a new one. LASER have stated that in order to guarantee that the Council can participate in future procurements of energy beyond the current period of the contract a commitment to using their framework agreement must be made as soon as possible.

Energy is purchased under an arrangement called Flexible – Purchase Within Period (PWP). Under this system, typically 70% of energy is bought in advance and 30% is bought in period – each period is for six months. At the beginning of the period the supplier quotes a reference price. This carries a small risk premium. At the end of the period, prices are reconciled and the council either receives a rebate or is asked to make a small payment - the difference between the reference and the actual out-turn price. Since the beginning of the current contract, in October 2008, the council has always received a rebate but this is not a guarantee of future performance

The one exception to the above is non half-hourly electricity which is billed quarterly. This is purchased under an arrangement called Flexible – Purchased In Advance (PIA). All the energy is purchased in advance for a period of twelve months. This is due to the relatively small total for the energy and the large number of accounts. Some of this consumption is recharged to Leaseholders and this arrangement ensures that prices are known and predictable.

The London Energy Project (LEP) estimates that the average London Borough benefits by £161k per year as a result of using the framework (£83k: aggregation; £54k: bid/offer spread; and £24k; load shaping). The cost of energy is anticipated to rise significantly over the coming years. See Section 6 for a review of the marketplace and anticipated price rises

The Council has put significant effort into establishing the processes and equipment to monitor energy usage. Automated Meter Reading (AMR) is in place for the majority of our larger sites

Energy prices are subject to significant short term fluctuations and in order to ‘hedge’ the risk involved in procuring energy a portion (up to 70%) of energy used is purchased in advance of the period of use. Failing to take advantage of the bulk advance purchasing that LASER can achieve will lead to the Council paying significantly more (20-30%?) for energy compared to current prices.

Details on current usage can be found in Appendix A – Present arrangements.

3. Lessons learned from existing contract

A review of the current contract has been carried out and the following lessons have been noted.

What works well:

- Supply of gas and electricity
- Management of supply under LASER framework
- Professional management of energy spend (VfM)
- PWP
- AMR

What could be improved:

- Ensuring that we don’t get red bills

- Ensuring that budget holders carry out appropriate checks etc
- Provision of AMR to our smaller sites (to reduce the number of estimated bills).

4. Scope of Project

The services to be procured through the new contract are intended to support operational objectives that will:

- Provide energy to the buildings listed in Appendix F
- Minimise Council energy bills
- Improve monitoring and control of energy use
- Reduce the Carbon Footprint of council buildings
- Improve the efficiency of the invoice management system

Provision of energy to Schools/ Academies

In Harrow, at present, all our schools purchase their energy centrally accounting for 64% of the council's gas consumption and 41% of our electricity consumption. It is not clear the degree and speed that schools will move towards academy status over the life of the contract. This is a major uncertainty for potential suppliers and would be reflected in their prices.

Schools have indicated that they wish to remain in the current arrangements. They suggested end date for next contract of August 31 2016 to coincide with school financial year. This has been investigated and is not recommended. The current start and end dates coincide with the six-monthly buying periods within the wholesale energy market. Stepping out of line would complicate buying policy for Central Purchasing Organisations with a risk that prices would rise as a result.

The council can continue to purchase energy centrally on behalf of academies if requested to do so.

To provide certainty of demand we will want schools and academies to sign up for the SLA up for the duration of the next contract.

5. The business requirement (including outcomes)

- Provision of gas and electricity to all council buildings (including schools)
- Effective management of energy provision (monitoring, control, invoice management)

- Protect the Council (as far as possible) from the anticipated rises in energy prices and volatility in the energy markets
- To put the new contract in place in a timely manner that avoids any risk to supply or cost

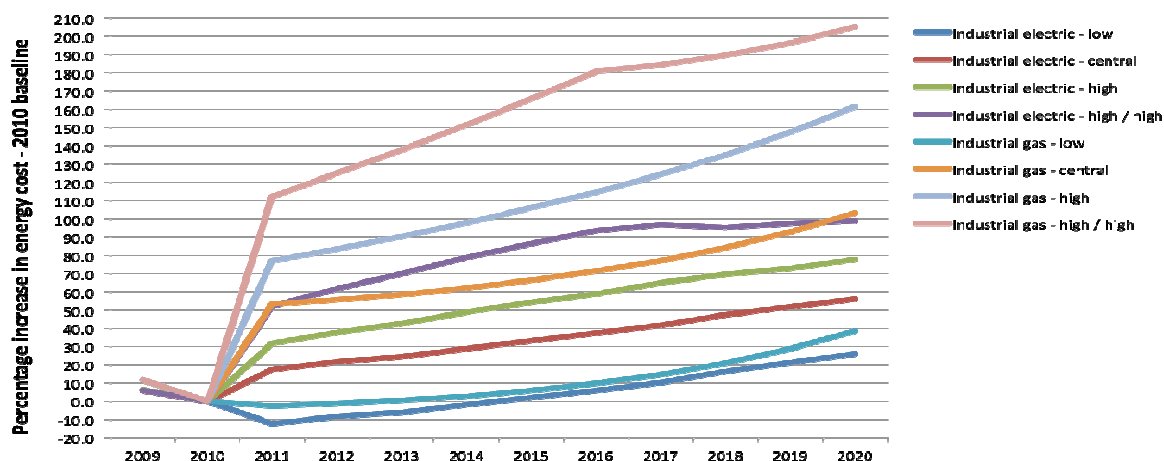
6. Review of Marketplace

Energy market trends

The basic trend in the energy supply market for the next decade is for prices to rise. There is a large range in both the size and pace of forecast. The prediction is that there will be significant short-term fluctuations in price on the way.

- Macro trend
 - Energy prices will rise continually (see the DECC graph below)
 - Infrastructure costs will rise (LEP estimate 50% by 2016) due to:
 - Establishing infrastructure to distribute renewable energy
 - Government energy and climate change policies
 - EU ETS
 - Commodity costs will rise (LEP estimate 50% by 2016) due to:
 - Peak oil
 - Increased demand
 - Nuclear stations end of life
 - Alternative energy sources will come on stream
- Micro trends
 - Short term fluctuations due to:
 - Political events
 - Natural events (climate etc)
 - Economic events

DECC energy price forecast



The use of a Central Purchasing Organisation is recognised best practice for the procurement of energy in the public sector. The London Energy Project (LEP) was established regionally to ensure that all London Boroughs adopted best practice. This has largely been achieved to the extent that all boroughs now buy energy on a flexible price basis and two CPOs dominate the market in London – LASER and GPS. Performance measures demonstrate that these two organisations have been consistently, and by some distance, the two best performing CPOs for energy supply over a period of time. In terms of volume LASER and GPS are significantly larger players than the other CPOs.

LEP is continuing to work on improving the procurement arrangements for London’s energy procurement and is negotiating with LASER and GPS to set new benchmarks etc going forward.

Green electricity

We currently purchase green electricity for public lighting. There is a small premium of approx. 0.2 p kwh (i.e. £12,000 per year) for this option. This policy has been in existence for at least 15 years. The use of green electricity can be used to offset our greenhouse gas emissions under the GHG emissions reporting framework. From 2013, street lighting will be included in the CRC scheme, but the purchase of green electricity will not be taken into account as for the CRC we have to use the average grid carbon intensity figure.

We will continue to buy green electricity for public lighting as this confers a marginal advantage in terms of GHG (Green House Gas) emissions reporting.

London Energy Project

The London Energy Project (LEP) was established in 2006. It enables the public sector to achieve efficiencies through smarter energy buying, improved process and

carbon reduction. They estimate that they enabled boroughs to save £16 million in 2009/10, through joint procurement, improved price risk management, and efficient data management and payment processes

LEP provides directed leadership, practical support, shared learning and collaborative working opportunities and play a proactive intermediary role between boroughs and their service providers to improve the efficiency and quality of contracted services, derive greater value and performance from contracts, and provide coherent representation and policy influence through their pan-Government links.

Central Purchasing Organisations

OGC has estimated that the cost of going through the OJEU process is £30,000. By using a CPO (central purchasing organisation), local authorities do not need to go through a tendering process and will therefore save this cost. If the Council selected a different framework agreement there would be a significant amount of activity required to transition the systems, processes and data to work with the new provider's activity. This includes operations to collect energy usage data and to verify and pay the associated bills. Assuming each transfer takes an average of one hour, the change would take 15 staff-weeks to complete.

Using a CPO ensures that the overall costs of energy in the council are minimised. An individual local authority would be too small to make effective use of the energy wholesale market. Larger contracts result in better prices because the purchasing organisation can reap the benefits of: -

- Aggregation of supply. i.e. purchasing large blocks of energy enable purchasers to buy a greater proportion of energy at base load, minimise purchase at peak load and residual rates in the wholesale market
- Bid/offer price spread. i.e larger purchasing groups provide an opportunity to buy energy packages at prices lower in the offer spread in the wholesale market
- Load shaping. Load shaping allows aggregation across a range of demand curves to increase the proportion of energy bought under base load

LEP estimates that the average London Borough benefits by £161k per year as a result of the above (£83k: aggregation; £54k: bid/offer spread; and £24k; load shaping)

Established CPOs (central purchasing organisations) in London are:

- LASER
- GPS (Government Procurement Service)

Other CPOs include

- West Mercia

- West Midlands
- Follow link to contracts DB here <http://hub.westmidlandsiep.gov.uk/page.asp?PageRef=67> to find other energy frameworks

LEP advice:

LASER and GPS performance is essentially the same

There is a significant gap between LASER / GPS and other frameworks

The worst is up to 70% more expensive

Use PWP (Purchase Within Period)

LASER and GPS

In London there are two organisations that predominate – LASER and GPS (Government Purchasing Service). Both of these organisations comply with LEP's Statement of Requirements for CPOs.

GPS is a significant purchaser – purchasing energy for a wide range of government departments as well as councils. Harrow currently use LASER which procures energy for 23 London councils. LASER is a non-profit, arms-length, procurement agency based in Kent CC. Overhead costs are recovered by a declared recovery rate per kWh.

LASER and GPS are recognised as the two best performing CPOs in relation to energy procurement.

Under the LEP's Statement of Requirements, we enjoy the following added value benefits: -

- Bill validation at the point of payment. Normally 20% of all supplier invoices could fail at the validation stage.
- Customer support: invoice queries related to metering (problems with meters and the gas and electricity infrastructures), technical advice (helps to resolve disputes with the existing energy suppliers),
- Provide estimates of costs accruing to facilitate budgetary provision for outstanding invoices.
- Facilitate sites supply transfer of un- anticipated sites
- Edi (electronic data interchange) – transmission of all energy invoices electronically (paperless bills)
- Assisting organisations in their AMR project
- Transparent recovery and other relevant rates

The administrative cost, to the council, of changing from LASER to GPS would be significant as all existing files would need to be assigned new reference numbers. There appears to be no financial advantage in changing from LASER. It is recommended that we continue with LASER

Detailed pricing information supporting the recommendation to use LASER

Buying energy is a complex activity. Variability in pricing means that the timing of a purchase is a key factor in determining that the cost of energy is minimised. The level of risk that the purchaser is prepared to run must also be considered. Early purchase of energy fixes the price (i.e. removes the risk due to the volatility of energy prices), however a risk premium is paid that increases the price. Purchasing energy closer to the time of use reduces the risk premium; however the possibility of having to buy energy at a time when prices are high must be accepted. The cost of energy also varies dependent on whether it is purchased as base load or peak. Energy purchased in base load is considerably cheaper than energy purchased at peak – the skill is to minimise the amount bought at peak, without over buying (and therefore not using) the energy bought at peak. The buyer’s ability to balance all the factors to achieve optimum unit price is improved when they are buying large volumes of energy – risk can be spread more effectively, and peak purchases minimised.

The volume of energy purchased by the Council makes it more effective to combine with other purchases so to gain the benefits associated with bulk purchase. Further, the Council does not have the necessary skills and knowledge to manage its energy purchase in detail. The Council currently takes advice from LEP (The London Energy Project) in how to buy energy effectively, along with most of the other London borough councils. Based on this advice the Council established its current contract through the LASER framework agreement managed by Kent County Council. The Council has an established approach to balancing price minimisation with risk management where a portion of its energy is purchased in advance (PIA) and a portion is purchased within period (PWP). See Appendix A for the volumes of gas and electricity that the council purchases each year.

LEP recommend two framework providers as providing the best value: LASER and the Government Procurement Service:

“The LEP in collaboration with the pan government project has evaluated the aggregated, flexible, risk managed contracts provided by LASER and Government Procurement Service (formally Buying Solutions) and recommends their use at contract renewal.” (LEP)

23 of the London boroughs use the LASER framework. A recent Cabinet Office study bears out that the performance of LASER and GPS over recent years is very comparable and that this performance is significantly better than that achieved by other public sector consortia. LASER performance figures are included below.

It is important to be aware that:

“The total cost of any energy contract is made up of areas of cost that can and cannot be controlled. Regulated fees for pipes, wires, metering, etc. are set by government and have no competitive elements. Commodity costs are controllable, but are market driven and subject to some form of floor/base price. The supplier margin and cost to serve is competitive and evaluated, but is a small percentage of the contract price and finally, buying organisation fees, which could perhaps reduce over time, but once again are marginal.” (LEP)
Further “Prices can fluctuate up to 5% on a given day and up to 100% in a year.” (LEP)

The various factors described above mean that establishing that one energy consortium has outperformed another is not a simple task. The Cabinet Office has recently produced figures that show the performance of various public sector buying consortia. We understand from LEP that these confirm that LASER and GPS have performed comparably and have significantly outperformed other consortia. LEP have provided the figures for LASER and GPS that confirm that their performance over the last two years is very similar. These show that over the period both companies have outperformed the market benchmark – this is a commendable achievement as achieving the benchmark figure would typically be seen as good performance.

The following extracts are from the Cabinet Office report on LASER performance:

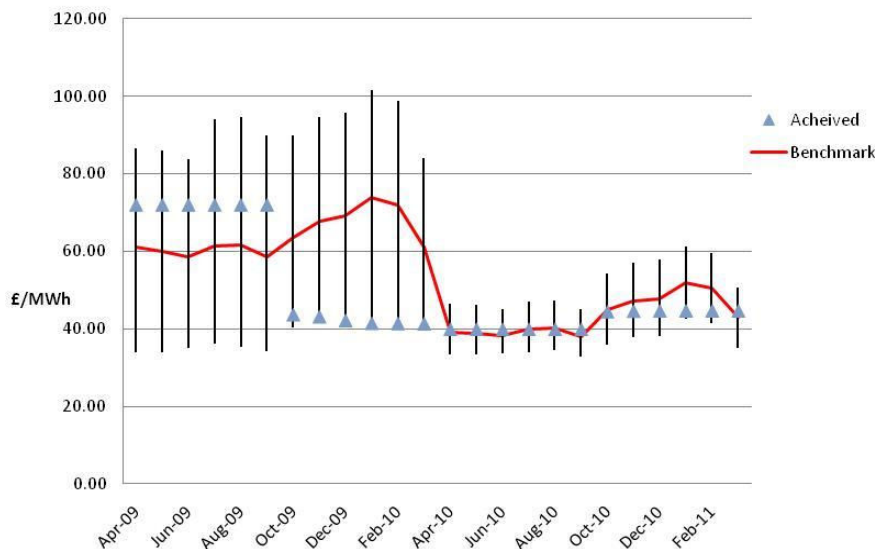
Energy Purchasing Performance (Electricity)

The Efficiency and Reform group within the Cabinet Office has developed metrics to help assess the performance of wholesale energy purchasing as part of its work on Centralising Category Procurement. These aim to show the performance of wholesale purchasing for a financial year (April to March) against a market average of prices achievable over the 12 months preceding the financial year. No account has been taken of ‘purchasing windows’ or strategy to focus on direct financial performance effecting the budget holder over the financial year.

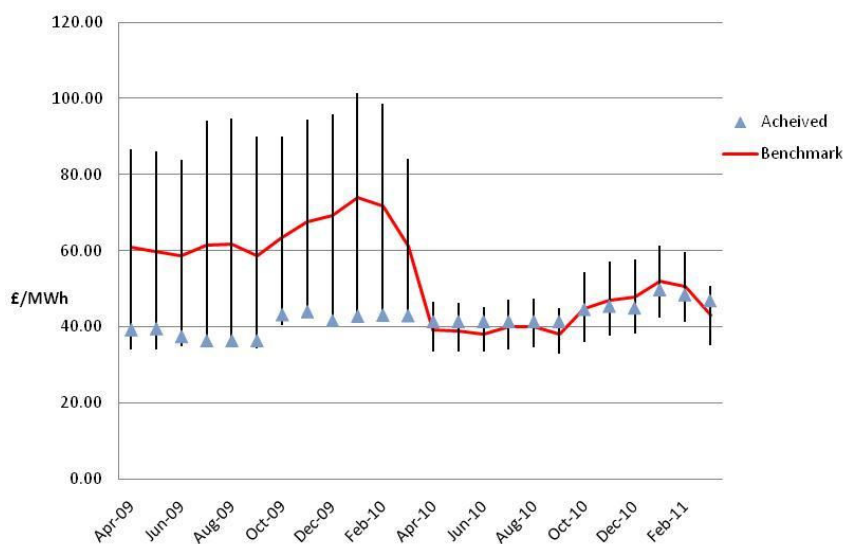
- The wholesale cost of energy is 50 to 60% of the total delivered costs on average and is the greatest variable in terms of value for money
- ERG analysis has shown that the best public sector PBO’s consistently outperform the market average which is considered class leading performance in either the public or private sectors for energy procurement
- ERG have independently compared the wholesale prices that LASER achieved against this benchmark as shown on the graphs below. These show the range of prices that were available from market (black vertical lines) and the benchmark (red line) and achieved price of LASER

- While monthly performance has been variable (this is to be expected given the volatility of the market) it shows that **over the 2 year period LASER has outperformed the benchmark price by 7% for the PIA strategy and 20% for the PWP strategy on average**

Laser PIA Electricity Performance



Laser PWP Electricity Performance

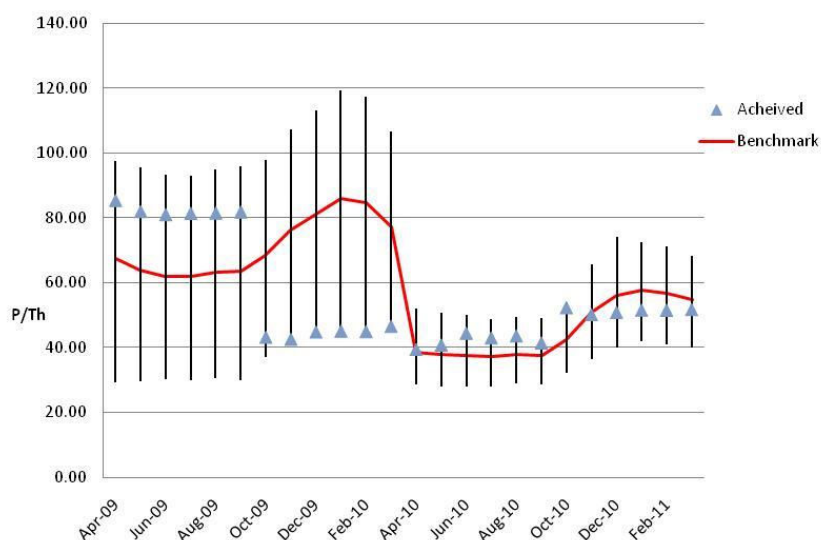


Energy Purchasing Performance (Gas)

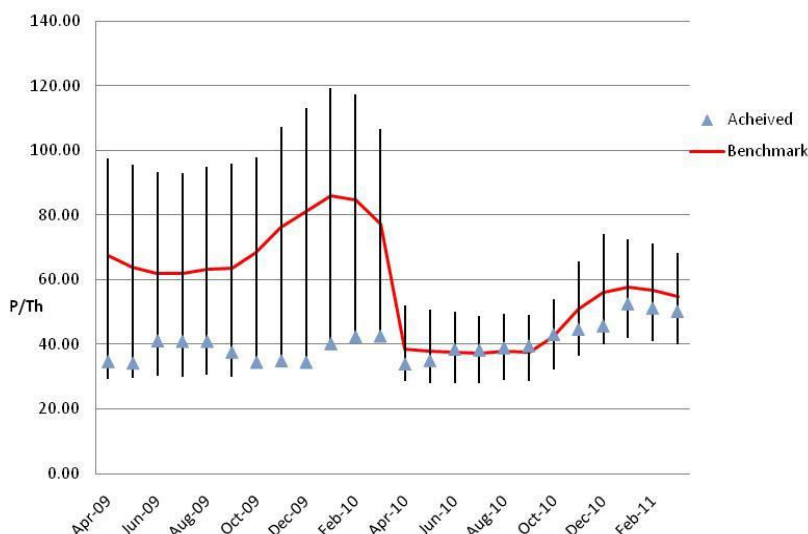
A similar approach to assessing the performance of wholesale purchasing has been developed for gas.

- The wholesale cost of gas is 60 to 70% of the total delivered costs on average and is the greatest variable in terms of value for money that can
- be influenced by the buyer / PBO
- ERG analysis has shown that the best public sector PBO's consistently outperform the market average. This is class leading performance in either the public or private sectors for energy procurement
- ERG have independently compared the wholesale prices that LASER achieved against this benchmark as shown on the graphs below. These show the range of prices that were available from market (black vertical lines) and the benchmark (red line) and achieved price of LASER
- While monthly performance has been variable (this is to be expected given the volatility of the market and October pricing for PIA) **it shows that over the 2 year period LASER has outperformed the benchmark price by 6% for the PIA strategy and 30% for the PWP strategy based on a flat consumption profile**
- It is notable that the performance for the winter heating period (Nov to March) which is the key consuming months for gas has been excellent

Laser PIA Gas Performance



Laser PWP Gas Performance



As part of the continuous development of the council’s procurement strategy, the Climate Change Section, in collaboration with the procurement service and others will closely monitor the market place so as to strengthen its understanding and build a robust negotiating position with potential contractors.

7. Procurement Options Appraisal

The options considered were:

- Commit to another 4 years using the LASER framework
- Use the GPS framework (the other LEP recommended framework)
- Use a non LEP recommended framework
- Run a full tendering process independently

The cost of tendering independently is estimated at £30k. The amount of energy the council uses is too small to allow the council to access the energy wholesale markets and the prices paid would as a result be higher than if we were to continue to use the current arrangements. As detailed above, the London Energy Project (LEP) estimates that the average London Borough benefits by £161k per year as a result of using a CPO.

It is therefore recommended that the council join a CPO.

Given that LASER and GPS are considered to be the market leaders for energy procurement, there is little evidence to recommend changing to a smaller provider.

Changing from LASER to GPS would require a substantial administrative effort as all the individual energy accounts would need to be renumbered. It is therefore recommended that with continue with LASER for the next four-year period (October 2012 to September 2016)

8. Procurement route

This contract falls within the EU Procurement Regulations. The intention is to procure using the existing LASER framework agreement. This has been established by Kent County Council and is OJEU compliant. Harrow Council already use this framework for the existing contract (as do the majority of London boroughs).

9. Project Structure for appointment of new contract

It is recommended that the council appoint LASER as its CPO for the provision of energy for the period October 2012 to September 2016.

Community and Environment and our Procurement business partners have been involved in the drafting of this Procurement Strategy. The key dates are set out in section 10 below.

There is no specific need to establish a project team to complete this procurement exercise

10. Key procurement dates

Activity	Date
Complete procurement strategy	30 th September 2011
Gain approval from key stakeholders (see section 12 below)	
Cabinet decision	18 October 2011
Confirm in principle commitment to LASER by email subject to formal contract	19 October 2011
Sign formal agreement with LASER	<i>November 2011</i>
Contract start date	<i>1 October 2012</i>

11. Service Budget

The energy market is highly volatile and it is difficult to make accurate predictions for future budgets. These will need to be closely monitored and adjusted to reflect the current market price.

It may be more useful to set budgets in terms of kilowatt-hours rather than in monetary value

Appendix A shows the current annual electricity and gas consumption.

Anticipated revenue spend:

Year	GAS (10% increase pa) £000s	ELECTRICITY (6% increase pa) £000s	TOTAL £000s
2011/12 base year	1737	2480	4217
2012/13	1910	2630	4540
2013/14	2101	2788	4889
2014/15	2311	2955	5266
2015/16	2543	3132	5675
Total value (contract period)	8865	11505	20370

Use LEP Vfm/benchmark/performance indicators

12. Stakeholder Management

Key Stakeholders

The key stakeholders for this project are:

- Council members - Cabinet
- Internal to LBH
 - Purchasing department
 - Legal
 - Finance
 - Schools
 - Academies
- London Energy Project (LEP)

Leaseholders

In terms of volume, leaseholders’ energy demand is not significant. Although leaseholders will need to be consulted with, the council does not need to wait for approval before letting the remainder of its energy consumption (and thereby risk paying higher prices)

Leaseholders in council housing need to be consulted as part of this process as the cost of communal electricity serving common areas is recharged to them. Sections 18 to 20ZA of the Landlord and Tenant Act 1985 relates to variable charges for leaseholders and the Service Charges (Consultation Requirements) (England) Regulations 2003 require landlords to consult with leaseholders before entering into a qualifying long-term agreement (“QLTA”) or carrying out qualifying works to residential premises in England.

Section 19(1)(a) of the Landlord and Tenant Act 1985 applies a reasonableness test to the charge. If the charge is likely to be less than £100 per leaseholder/year there may be no need to conduct a consultation. However if a lack of consultation is challenged and upheld charges in excess of £100 per flat per year (or £250 in respect of qualifying works) cannot be applied to leaseholders.

Consultation will take about four months. However energy purchasing is recognised as being a different market to the services usually provided to leaseholders. By utilising the council’s purchasing power, leaseholders will have access to unit prices that are substantially lower than prices available on the retail market.

13. Risks

See Appendix D (separate Risk Register)

14. Dependencies

No critical dependencies - as we will continue the use of the existing processes without change.

15. Due diligence information

If the recommendation to renew the contract under the LASER contract is accepted then minimum due diligence information will need to be made available. Existing suppliers under the framework already have the information they require to operate the contract (usage profiles, building locations, meter information).

If the recommendation is not accepted then considerable due diligence effort will be required to collect the required information. Exactly what this would require depends on the purchase option to be pursued. Collecting the information would take up to a month to carry out.

16. Design of Client

The climate change section provides the client function for the service. No changes to the operation of the client are anticipated.

17. Conclusion and recommendation

There is a pressing need to ensure that the Council does not miss making a commitment to procure a portion of its energy in advance. The likely benefit of doing a more detailed comparison of procurement options is vastly outweighed by the risk of not having an agreement in place in time to procure energy sufficiently far in advance and ending up paying significantly higher rates than is currently the case.

Recommendation 1:

It is recommended that the council continue with the current arrangements to use LASER for the procurement of its energy supplies for the period October 2012 to September 2016

Recommendation 2:

Carry out an exercise to ensure that the new contract (with LASER) is based on accurate information concerning all sites and meters etc. [Drafting comment: the assumption is that we already have good information, however this looks to be an opportune moment to confirm this.]

Recommendation 3:

Carry out a communication exercise to ensure that there is good awareness of the renewed contract, plus any responsibilities associated with it. In particular responsibilities regarding bill payment and meter reading should be clarified.

18. Approvals

Approval to proceed on the basis of the information contained in this procurement strategy has been obtained from:

Role	Who
Portfolio holder	Thaya Idaikkadar
Business manager (who owns the area that will be affected)	All energy budget holders
Technical lead	Andrew Baker
Business area director (budget holder)	Brendon Hills

Procurement	Tony Coffey, Dan Firth
Finance	Kanta Hirani Emma Stabler
Risk Management	Neal Burns
Schools	David Harrington
Legal	Stephen Dorrian

Appendices

Appendix A – Present arrangements

The council has six sub-contracts (two for gas and four for electricity): -

Tariff type	Users covered	Number of meters	Annual MWh	Fixed/Flexible Price Term	Other comments
Half-hourly electric	Major buildings	3	4,673	Flexible 4 years	All included in CRC AMR fitted
	Schools	16	5,094		
Non half-hourly electric	Small buildings	55	3,003	Flexible 4 years	Some excluded from CRC Majority fitted with AMR
	Schools	44	5,254		
Non half hourly electric Quarterly billed	Housing communal areas, parks etc	319	1,990	Flexible 4 years	Excluded from CRC No AMRs
Major gas (over 25,000 Therms)	Major buildings	11	10,061	Flexible 4 years	All included in CRC AMR fitted
	Schools	29	28,897		
Minor gas (under 25,000 Therms)	Small buildings	50	12,533	Flexible 4 years	Some excluded from CRC Some AMR fitted
	Schools	23	8,393		
Half-hourly electric Public lighting	All street lighting and public lighting	n/a	7,545	Flexible 4 years	Passive metering (Not currently in the CRC) Green electricity

Contracts will expire on 30 September 2012.

Total consumption

- schools
- others

47,638 MWh
39,805 MWh

Appendix B – Details of procurement options appraisal

Section deliberately left blank – See Section 7.

Appendix C – Project program dates

See Section 10

Appendix D – Risks

See separate risk register

Appendix E – Client design drivers

Section deliberately left blank – current client will continue unchanged.