

Report to Steve Read, Director of Environment and Public Protection

November 2021

Award of Contract for Performance Monitoring, Operation and Maintenance of Rooftop Solar PV Systems

Report by Andrew Tolfts, Consumer Lead, Energy Services

Electoral division(s): All

Summary

Since 2015 the County Council has installed solar photovoltaic (PV) systems at 80 non-domestic sites and 222 domestic properties. These support the delivery of the County Council's Energy Strategy and Climate Change Strategy. Decisions taken in [March 2017](#) and [August 2018](#) refer.

Regular and reactive maintenance of these systems is essential for their continued efficient operation, to maintain the benefits to building occupiers and to deliver the projected financial performance. The business cases for solar PV installation included provision for maintenance which will be provided through this contract.

Monitoring of PV system performance has, until now, been carried out manually and reactive maintenance has been addressed through a short term contract. It has been recognised that an automated performance monitoring system would result in earlier fault identification and increased generation. A competitive procurement exercise to secure comprehensive performance monitoring and maintenance services was undertaken in accordance with the Public Contracts Regulations 2015 and the Council's Standing Orders on Procurements and Contracts.

Recommendations

That the Director of Environment and Public Protection awards the contract for Monitoring, Operations and Maintenance of the Council's Roof Mounted Solar Power Systems to Ecovision Asset Management Ltd. as a single supplier for the sum of £478,477. The contract is for an initial term of 3 years with the option to extend for up to a further 2 years commencing on 01/04/2022 as set out in section 2 of the report.

Proposal

1 Background and context

- 1.1 Since 2015 the Council has installed 222 roof top solar PV systems on social housing properties and 80 PV systems on school, corporate and commercial sites. The total installed capacity is 5.4MW.
- 1.2 The installations follow the recommendations in the Council's Climate Change and Energy Strategies. They reduce electricity bills, avoid the emission of 5740 tonnes of CO₂ over a five year period, provide social value by supporting fuel poor and vulnerable residents and generate the required return on investment.
- 1.3 To date, performance monitoring has been undertaken utilising the existing WSCC procured SIGMA database. This method has required internal officer management and manual scrutiny of generation data.
- 1.4 In addition, the physical, reactive operation and maintenance has been completed using a specialist maintenance contractor on a short-term contract.

2 Proposal details

- 2.1 Regular and reactive maintenance of the solar PV systems is essential for their continued efficient operation, to maintain the benefits to building occupiers and to deliver the projected financial performance. The business cases for solar PV installation included provision for maintenance which will be provided through this contract.
- 2.2 The recommended contract to be taken forward will meet the requirements WSCC has for managing its roof-top solar generation assets. It will be funded from existing resources as set out in section 5.1 below.
- 2.3 The selected contractor will monitor all solar generation assets remotely and will have firm KPIs embedded within the contract to ensure all assets are performing optimally.
- 2.4 The proposed contract will reduce the need for officer time to be spent interrogating performance data of specific assets.
- 2.5 The Procurement Team chose to run a Restricted 2 Stage Tender to select a contractor to monitor and maintain the roof top solar systems. This was thought to be the most appropriate process as this is a specialised field of work in which the Council has limited experience. The approach was endorsed by the Commercial Panel in June 2021.
- 2.6 A [contracts finder notice](#) was published on 12th July 2021.
- 2.7 Fifteen organisations expressed interest in the opportunity and four registered an intention to bid. Four responses were received at stage 1 but one was judged not to meet the criteria so was eliminated. Three bidders were invited to submit a full proposal at stage 2 of the tender process.
- 2.8 Three responses to stage 2 of the tender process were received.
- 2.9 The County Council undertook compliance checks on the tender submissions to ensure all schedules required were included and that the tenders were correct.

- 2.10 The tenders were evaluated by a multi-partner, multi-disciplinary panel between 23rd September 2021 and 4th October 2021. The panel considered both quality and cost. A moderation meeting was held on 5th October 2021 to discuss and agree final scoring.
- 2.11 Cost was assessed in relation to pre-tender estimates which in turn were based on the Council's experience of managing the rooftop solar systems. Quality criteria were given particular consideration as a non-generating system reduces income to the Council.
- 2.12 The successful tenderer, Ecovision Asset Management Ltd. has worked in solar PV performance monitoring and maintenance for almost 13,000 sites in social housing, for schools, the public sector and with private sector commercial clients.
- 2.13 Following a mobilisation period, the contract will commence on 1st April 2022 for an initial period of 3 years with the option of two annual extensions thereafter.

3 Other options considered (and reasons for not proposing)

- 3.1 The option of continuing to manage the maintenance in-house was rejected as the County Council does not have the required capability to provide the automated monitoring of system performance required for this number of solar PV systems.
- 3.2 An open tender was rejected as it might have attracted a large number of bids whereas a 2-stage tender allowed unsuitable providers to be filtered out at an early stage.

4 Consultation, engagement and advice

Consultation on the final bid response has been carried out internally with the following parties:

- Legal
- Commercial Finance
- Procurement

5 Finance

5.1 Revenue consequences

The cost of maintenance was included in the financial models which supported the decisions to invest in solar PV systems. Income received from central government incentives (the Feed in Tariff Scheme), sale of electricity to schools and sale of electricity exported to the supply network is sufficient to meet the cost of maintenance, provision for expected equipment replacement and repayment of the invested capital. Therefore, the expenditure can be funded from within existing resources.

The planned annual expenditure profile for this contract is shown below:

	Year 1* 2021/22	Year 2 2022/23	Year 3 2023/24	Year 4 2024/25	Year 5 2025/26	Total
Revenue budget	£112,378	£88,767	£89,726	£92,418	£95,190	£478,477

* Year 1 includes £24,542 initial site assessment exercise.

The initial site assessment replaces an annual site inspection. The costs and benefits of the contract in year 1 are summarised below:

First year cost estimate	New contract, excluding initial assessment	Existing arrangements
Annual inspection	24,542	21,200
Performance monitoring	3,383	3,000
Reactive maintenance	59,911	48,823
Additional revenue from increased generation	-16,822	
Total	71,014	73,023

The automated performance monitoring system will identify faults more quickly and result in additional generation and income to offset the additional cost, alongside carbon savings.

5.2 Capital consequences - none

5.3 The effect of the proposal:

(a) **How the proposal represents good value**

The market for maintenance of rooftop solar PV assets has developed and become more sophisticated over the last 5 years with automated monitoring that takes account of prevailing weather to identify poorly performing systems. This provides assurance of performance similar to the design targets with minimum down time and will enable the County Council to at least meet the planned financial performance of the solar PV assets.

The procurement was designed to achieve the lowest price possible without compromising the level of service required to maximise solar generation.

(b) **Future savings/efficiencies being delivered**

Establishment of an effective monitoring, operations and maintenance for the County Council's roof top solar systems will ensure their efficient operation and maximise renewable generation and savings. It will be a model for management of planned additional solar PV installations.

(c) **Human Resources, IT and Assets Impact**

The time required for Council staff to effectively manage these assets will be reduced and their continued good condition and performance will be ensured.

6 Risk implications and mitigations

Risk	Mitigating Action (in place or planned)
Contractor delivers a poor quality service due to mismanagement	The tender submission from Ecovision Asset Management Ltd. and specification are included in the body of the contract. Clear Key Performance Indicators (KPIs) and provision for Low Services Damages provide an incentive to high service levels and a means for redress for the Council.
Appointed contractor has inadequate prior experience and management systems	The procurement process was robust, with suppliers vetted for previous experience, systems available to provide the services and suitability to deliver.
Contractor subject to supply chain or qualified technician shortages largely outside of their control	<p>The contractor's submission includes commitments to:</p> <ul style="list-style-type: none"> • work with the Council to recruit an additional suitably qualified engineer locally • support the entry of young people to employment through the government's Kickstart scheme <p>Would expect the contractor to notify the council about any shortages of spares and equipment and submit a plan to mitigate the impact in accordance with general contract provisions.</p>
Reputational risk if poor quality service delivered to schools and social housing residents	<p>During the procurement process the supplier's ability to provide services to these particular user groups was assessed.</p> <p>Monthly reporting and coordination meetings linked to KPIs will allow close management of this risk.</p>

7 Policy alignment and compliance

7.1 Policy Alignment

Appointing an operations and maintenance contractor for our rooftop solar PV systems supports the delivery of the following priorities in [Our Council Plan](#):

- **A Sustainable and Prosperous Economy:** the priority given to use of a locally based workforce and any skills training required supports the transition to a low carbon economy in West Sussex.
- **Making the Best Use of Our Resources:** Using suitable rooftops for renewable electricity generation is good use of this resource. It is enhanced by ensuring that the solar PV assets work as well as possible with the minimum downtime. This also provides the best financial outcome.

7.2 Legal Implications

The procurement process undertaken for this contract was fair and robust providing no or very limited grounds for legal challenge.

7.3 **Equality and Human Rights Assessment**

The public sector equality duty will apply to the delivery of services under this contract. There will be minimal direct implications for groups with protected characteristics but full regard for the public sector equality duty will be required throughout the contract duration.

7.4 **Climate Change**

Maintaining a high level of performance from our solar PV assets is closely aligned with the County Council's Climate Change Strategy and Energy Strategy. It will facilitate the installation of further rooftop solar PV systems and may support other actions for the local use of locally generated electricity.

7.5 **Crime and Disorder**

Providers will be required to adhere to legislation, including Disclosure and Barring Service checks for all staff working on school and social housing sites.

7.6 **Social Value**

Alignment to the Council's social value objectives was a key part of the specification for these services, reflecting the County Council's duty under the Public Services (Social Value) Act 2012. Social value metrics are included in the KPIs and will be reviewed on an annual basis.

The contractor's submission included commitments to:

- working with the Council to recruit an additional suitably qualified engineer locally
- supporting the entry of young people to employment through the government's Kickstart scheme
- growing their apprenticeship programme and
- supporting the Council's communications about the benefits of renewable energy

Steve Read

Director of Environment and Public Protection

Contact Officer: Andrew Tolfts, Consumer Lead, Energy Services
03302 228 563
andrew.tolfts@westsussex.gov.uk

Appendices – none

Background papers – none