



Surrey County Council - Waste PFI Eco-Park

Quantitative Value for Money Analysis

16 April 2015

Important Notice

Deloitte LLP ("Deloitte") is acting for Surrey County Council ("SCC" or "the Client") on the terms set out in the engagement letter dated 1 March 2013 (the "Engagement Letter") in connection with SCC's Waste PFI contract, changes to its Eco-Park solution and disposal of municipal household waste (the "Project"). Deloitte is responsible to SCC and will not be responsible to anyone other than SCC for providing advice in relation to the Project.

This document, which has been prepared by Deloitte, has been prepared for the sole purpose of assisting the Client in undertaking an updated quantitative value for money analysis of the proposal by SCC's existing contractor Sita Surrey Limited to design, build, finance and operate an Eco-Park under the Eco-Park Deed of Variation as submitted to the Client in connection with the Project.

The information contained in this document has been compiled by Deloitte and includes material obtained from information provided by the Client, Mott MacDonald, Sita Surrey Limited, discussions with the Client and published sources which Deloitte use regularly but has not been verified. This document also contains confidential material proprietary to Deloitte.

This document also includes certain statements, estimates and projections provided by SCC with respect to anticipated future performance. Such statements, estimates and projections reflect various assumptions concerning anticipated results and are subject to significant business, economic and competitive uncertainties and contingencies, many of which are or may be beyond the control of SCC. Accordingly, there can be no assurance that such statements, estimates and projections will be realised. The actual results may vary from those projected, and those variations may be material. No representations are or will be made by any party as to the accuracy or completeness of such statements, estimates and projections or that any projection will be achieved.

This document and its contents are confidential and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person in whole or in part without the prior written consent of Deloitte.

CONTENTS PAGE

	Page
Executive Summary	4
1 Project Background	7
2 Scope	8
3 Quantitative VfM Analysis	9
Appendix 1 Quantitative VfM Analysis and Financial Advice – Report 31 October 2013	
Appendix 2 Quantitative VfM Analysis Assumptions & SCC Risk Work Paper	
Appendix 3 Estimated Termination Costs	
Appendix 4 Options Assessment – Changes Since October 2013 DoV Report	
Appendix 5 SSL Financial Models	

Executive Summary

Background

Since 2008, Surrey County Council ("SCC") has been working with Sita Surrey Limited ("SSL" or "Sita") to develop a Deed of Variation to develop an Eco-Park at the Charlton Lane site. The Eco-Park will comprise a gasification facility (the "Gasification facility") and Anaerobic Digestion ("AD") facility. The Eco-Park Deed of Variation ("DoV") was signed on 31 October 2013 and reflected a phased approach to delivery of the Eco-Park facilities. This phased approach reflected that the Eco-Park was subject to formal planning approval at the time. The DoV proposed capital expenditure of approximately £14m to enable construction of the Eco-Park to commence at a first Notice to Proceed ("NTP1") date in advance of formal planning approval.

Deloitte LLP ("Deloitte") was engaged to provide financial advice in respect of the DoV in October 2013. Deloitte's work included working with SCC to develop a quantitative Value for Money ("VfM") analysis for the proposed Eco-Park when compared to SCC's identified alternative options for waste disposal. In addition, Deloitte also provided commercial advice on selected aspects of the transaction as instructed by SCC. The outcome of Deloitte's work resulted in a report titled 'Quantitative VfM Analysis and Financial Advice' issued on 31 October 2013. That report detailed the outcome of the VfM analysis and related advice (refer to Appendix 1 for further details). This report provides an update on our previous work and should be read in conjunction with the report issued on 31 October 2013 which is included at Appendix 1.

Since October 2013, the Eco-Park has received planning permission and the final permit variation has been issued by the Environment Agency. As such, subject to the conditions precedent in the DoV being satisfied, SSL can commence the construction of the Eco-Park at Notice to Proceed 2 ("NTP2"). SCC expect NTP2 to reach financial close on the 31 May 2015.

Delays in obtaining planning permission and permits has extended beyond the EPC contract longstop date of October 2014. Consequently, SCC has now received a revised price from SSL's Engineering, Procurement and Construction ("EPC") contractor M W Group GmbH ("M+W"). As a result of movements in several cost items, SCC is updating the quantitative Value for Money analysis primarily to reflect the new EPC price in addition to updating market and other assumptions. This exercise is being undertaken in order to compare the project with SCC's primary alternative option for waste disposal (hereinafter referred to as the "Updated VfM").

Quantitative Value for Money analysis

Deloitte has based the Updated VfM analysis on the appraisal of two identified options over the period from 1 April 2015 to 31 March 2040, which reflects the expected life of the waste facilities. In accordance with HM Treasury guidance, the analysis incorporates risk adjustments in determining the Net Present Value ("NPV") of the costs for each option.

We have considered the following two options in the Updated VfM analysis:

- Option 1 – the current Waste Disposal Project Agreement ("WDPA") with SSL including the proposed SSL Eco-Park development at the Charlton Lane site based on an NTP2 date of 31 May 2015; and
- Option 3 – give notice to terminate the current WDPA with SSL on 1 May 2015 and re-procure a merchant third party energy from waste capacity for all residual waste.

SCC and its advisers concluded that Options 2 and 4, considered previously, no longer represent viable options for consideration by SCC due to timing implications and further risk issues. See section 3.2 of this report and Appendix 1 for further details of these Options.

Surrey Waste PFI - Final report 16.4.2015.docx

16/04/2015

Assessment of risk and sensitivity analysis

Deloitte has worked with SCC to undertake the quantitative Updated VfM analysis of Options 1 and 3 and in doing so followed a process that is consistent with that undertaken in October 2013. In particular, this involved the assessment of costs by SCC by working with their technical advisor, Mott MacDonald, as well as a full Risk Adjustment workshop.

Deloitte worked with SCC to undertake the quantitative Updated VfM analysis of Options 1 and 3. This involved developing and facilitating a risk workshop on 13 March 2015 with SCC and Mott Macdonald. Based on HM Treasury Green Book guidance, we have incorporated risk adjustments that we have assisted SCC to develop into the NPV cost projections where reasonable estimates could be provided for Options 1 and 3. SCC has formally approved the risk adjustments, inputs and assumptions set out in Appendix 2.

Before risk adjustment

The quantitative analysis indicated that Option 3 had the lowest NPV cost, £55.5m less than Option 1.

Option	Cost – NPV @ 1 April 2015 £m	Total Nominal Cost £m	NPV Difference from Option 1 (£m)	NPV Difference from Option 1 (%)
1	1,074.0	2,206.4	-	-
3	1,018.5	2,142.7	(55.5)	(5%)

After risk adjustment

Taking account of risk adjustment, the analysis indicates that Option 3 is c. £1.9m less than Option 1 in NPV terms. This represents approximately 0.17% of the total project cost of £1.1 billion in NPV terms. This is outlined in the table below.

This difference compares to a variance of £6.5m between (Option 3 more than Option 1) when the two options were compared in October 2013. The greater difference between the two Options in October 2013 was deemed to be immaterial in the context of the overall size of the project. As such, we concluded that given the immaterial nature of the difference relative to the project the qualitative analysis should determine the preferred outcome. As previously, given the immaterial difference in the NPV of the two Options we again conclude that the qualitative analysis should determine the preferred outcome.

Option	Cost – NPV @ 1 April 2015 £m	Total Nominal Cost £m	NPV Difference from Option 1 (£m)	NPV Difference from Option 1 (%)
1	1,119.9	2,334.4		
3	1,118.0	2,380.7	(1.9)	(0.17%)

Table 1 Risk Adjusted Quantitative VfM analysis - Source: SCC Options Spreadsheet

Mott MacDonald has been engaged by SCC to provide advice in respect of the costs that have been
Surrey Waste PFI - Final report 16.4.2015.docx

16/04/2015

proposed by Sita. In developing this report and the VfM analysis, we have used the costs that have been validated by Mott MacDonald, including estimated termination costs. As noted in October 2013 by SCC's legal advisers, such costs are difficult to quantify with any accuracy until such time as the Contractor (in this case Sita) makes a claim for such losses.

Financial and Commercial advice

We have not been party to the negotiations with SSL in respect of their updated costs. SCC has worked alongside Deloitte and its technical advisor in determining the movements in the capital and operating costs. Deloitte's work has not included a review of the commercial positions that have been agreed as result of the DoV.

Deloitte has reviewed the SSL model audit responses as provided in draft by Operis on the 25 March 2015. We have discussed these findings with SSL and SCC. SSL has confirmed that none of the issues raised in the draft report are material and SCC has confirmed that it is content with SSL's responses. On this basis, we do not expect future material changes to the SSL model. Our analysis has been undertaken on this assumption.

Outcome of the Updated VfM

As detailed above, Option 3 is £1.9m lower in NPV terms compared to Option 1. This is 0.17% of the total project cost of Option 1.

This difference is immaterial compared to the overall contract value project cost of £1.1 billion and therefore there is no clear preferred option based on the quantified VfM analysis alone. In order for the difference to be material the analysis inputs would have to move significantly, as illustrated below

The outcome of the VfM analysis is dependent on the assumptions and risk adjustments made. In this context, and as an example only, we note that a 17% risk adjustment has been applied to the contract cost under option 3 and that a 1% change to this assumption would have a £3m NPV impact.

It should also be noted that in the event that the Gasification facility does not benefit from the Renewable Obligation Certificate ("ROC") subsidy regime then this would have an adverse impact of £8.5m on the NPV for Option 1. This has been considered as part of the sensitivity analysis

We would recommend that SCC's decision should not be determined based on the quantified VfM analysis alone. SCC should also consider the qualitative considerations of the two options, taking account other significant value factors such as legal, strategic, contractual and economic development in assessing overall value to the public.

We understand that SCC and its technical advisors will address the qualitative aspects of the VfM analysis and will report separately.

In accordance with HM Treasury guidance, the PFI credits do not form part of the VfM analysis, however they will affect affordability. The impact of PFI credits is approximately £56m in NPV terms (see section below) indicating that Option 1 should be preferred from that standpoint.

Project Background

- 1.1 On 22 June 1999 SCC entered into an agreement (“the Original Agreement”) with SSL (formerly Surrey Waste Management Limited), a wholly owned subsidiary of Sita UK Limited, part of the Suez Group, to design, build, finance and operate two waste treatment plants and provide ancillary waste services including community recycling centres and transfer stations in Surrey. Planning permission was not obtained to build these facilities.
- 1.2 On 6 March 2007, the parties entered into a DoV of the WDPA between SCC and SSL that reflected changes in the waste management solution required by SCC, amendments required because of changes in the law and revised contractual processes required to govern future developments.
- 1.3 During 2008, SSC and SSL anticipated that a further DoV of the WDPA was likely to be required to enable the refinancing of the debt associated with the construction of one or two energy-from-waste (“EFW”) facilities by providing a project finance solution involving third party debt providers. However, planning issues resulted in the solution of the EFW facilities being undeliverable.
- 1.4 Since 2009, SCC has been working with SSL to develop a new DoV to deliver an Eco-Park solution comprising a Gasification facility and an AD facility.
- 1.5 The DoV for the Eco-Park solution was signed between SCC and SSL on 31 October 2013. The WDPA between SCC and SSL will expire on 19 September 2024.
- 1.6 Planning permission and final permit variations were approved in 2014. The capital cost price that was proposed by SSL expired due to it surpassing the long stop date in the contract October 2014. Consequently, SCC has received an updated suite of prices encompassing capital and operational expenditure from SSL’s subcontractor M+W for constructing the Eco-Park.
- 1.7 Following receipt of the revised costs in January and February 2015, SCC updated its VfM analysis for presentation to its Cabinet in April 2015.

2. Scope

- 2.1 The scope of Deloitte's work, as set out in our engagement letter dated 1 March 2013 (under Lot number 4.1 of the Consultancy ONE Framework Agreement) in respect of Financial Advice is as follows:
- 2.2 Updating the Quantitative Value for Money ("Updated VfM") Analysis comprising:
- Assisting SCC with its value for money and options assessment.
- 2.3 Deloitte has not been party to any direct negotiations between SCC and SSL since they signed the DoV in October 2013 regarding the financial structuring and/or the loan documentation.

3. Quantitative VfM Analysis (“Updated VfM”)

3.1 Introduction

3.1.1 As part of the SCC Cabinet and the Department for Environment, Food and Rural Affairs (“DEFRA”) approval process, SCC is required to undertake a VfM analysis to demonstrate that the Eco-Park DoV is value for money for SCC when compared to alternative options that are available. In accordance with HM Treasury (“HMT”) Guidance on VfM analysis (as set out in the HMT Green Book), VfM assessment is included in the Economic Case which comprises a quantitative and qualitative analysis of options. This assessment excludes PFI grant which is a transfer payment between DEFRA and SCC and as such is not relevant to the economic VfM analysis from an overall taxpayer perspective.

3.1.2 This report is only concerned with the quantitative financial analysis of SCC’s Updated VfM analysis. The qualitative analysis has been completed by SCC and its technical advisors and does not form any part of this report. We have worked with SCC to undertake the quantitative Updated VfM analysis of the SCC options (as presented in section 4 of this report). These should be considered alongside the qualitative analysis by SCC in order that the VfM of the options can be determined as envisaged in the HMT Green Book Guidance.

3.1.3 The primary focus of the quantitative Updated VfM analysis is to present the non-risk adjusted and risk adjusted Net Present Value of the two Options under consideration by SCC. The Updated VfM analysis also considers the difference between the NPV of the two Options (i.e. the relative VfM position) as agreed with SCC. In addition, the impact of removing PFI credits is presented with the quantitative Updated VfM analysis to inform SCC’s affordability considerations. However, the affordability and budgeting of the SCC options is being considered separately by SCC and does not form part of this report.

3.1.4 The quantitative Updated VfM analysis, as agreed with SCC, is based on the SSL model - Surrey FM2 Var6_v48b_11Yrs.xlsm (“the SSL Model”).

3.1.5 We would draw SCC’s attention to the following:

- The SSL Model provided by SSL and which forms the basis of the Updated VfM analysis has not been subject to our review. As instructed by SCC we have not updated our Parallel Model Scope of work which was previously undertaken in October 2013 (referred to as the “Parallel Model Scope” in our October 2013 DoV report).
- The SSL Model has been audited by SSL’s model auditor, Operis. At the time of writing this report Operis had issued a draft report indicating there are no material issues outstanding. We have reviewed the draft model audit report caveats that have been provided and Sita has confirmed that those points will either be addressed in the next two weeks or propose to make no changes. Sita has confirmed that none of the caveats detailed in the draft model audit report would make a material difference to the price. SCC has confirmed that they are content with the responses to the model audit queries that have been provided by Sita.
- The SSL Model includes a revised EPC Base Contract Price of £91.36m, which we understand is still subject to negotiation between SCC and SSL. However, we understand the EPC Base Contract Price is not expected to increase from this figure. For the purposes of the VfM analysis the £91.36m has been modelled without any risk adjustment.
- The Updated VfM analysis includes Eco-Park operations and maintenance costs extracted from the SSL model. The technical advisor has informed SCC that this is significantly more than they would expect for a facility of this nature. We understand that this is subject to ongoing discussion with Sita and SCC.

3.2 Options under Consideration

3.2.1 Deloitte has been instructed to assist SCC in respect of the quantitative Updated VfM analysis for the following options over the period from 1 April 2015 to 31 March 2040 in quantitative financial terms only:

- Option 1 – the current WDPA with SSL including the proposed SSL Eco-Park DoV at the Charlton Lane site based an NTP2 date of 30 April 2015
- Option 3 – give notice to terminate the current WDPA with SSL on 1 May 2015 and procure merchant third party energy from waste capacity for all residual waste

Note: SCC concluded, in discussion with its technical advisors, that the following two options no longer represent viable options for consideration:

- Option 2 – to terminate the current WDPA with SSL on 1 November 2013 and re-procure a 25 year project for an Eco-Park Development at the Charlton Lane site;
Rationale: the impracticality of its timing and previous assessments undertaken indicated that the costs exceeded that of other options.
- Option 4 - to terminate the current WDPA contract with SSL on 1 November 2013 and procure landfill capacity for all residual waste.
Rationale: SCC's waste strategy is to exceed the regulatory targets for landfill diversion. In addition, previous assessments undertaken by SCC indicated that landfill prices were subject to greater uncertainty and the risk-adjusted costs for this Option exceeded that of other options.

3.3 Approach to Quantitative VfM Analysis

3.3.1 It should be noted that working collaboratively with SCC, we have adopted the same robust and consistent process in respect of the risk workshop and adjustments as was used in the 2013 VfM analysis. There has not been any changes to this process throughout the course of the Updated VfM work. As noted below, SCC has reviewed and commented on the inputs and assumptions and risk adjustments and formally approved them on 16 April 2015.

3.3.2 Deloitte has worked with SCC to undertake the quantitative Updated VfM analysis of Options 1 and 3 as set out above and to update the previous inputs and assumptions used in the October 2013 VfM analysis. The inputs and assumptions for the Updated VfM analysis of Options 1 and 3 have been drawn from key sources as follows (all of which are documented at Appendix 2) :

- Inputs and assumptions provided by SCC from its Waste Monitoring spreadsheet (Waste Monitoring Feb 2014-15 NP to Deloitte 26 March 2015.xlsx ("WMS")) based on the SSL Model;
- Inputs and assumptions for Options 1 and 3 from the SSL Model received from SSL on 19 March 2015 (version Surrey FM2 Var6_v48b_11Yrs);
- Various meetings, correspondence and discussions held with SCC's waste team (notably SCC representatives from the Finance, Change and Performance Group, the Waste Contract and Infrastructure Manager from the Waste Management & Sustainability Service and the Finance Manager from the Environment & Infrastructure team);
- Risk adjustment assumptions provided by SCC and its technical advisors (Mott Macdonald) as agreed in a risk workshop on 13 March 2013 and subsequently updated in a meeting on 18 March 2015; and
- We understand that Mott MacDonald has liaised extensively with SCC on the cost base of the project. SCC has gained comfort on both the risk adjustments and the underlying

cost base from Mott MacDonald. The market adjustments on the EFW and AD prices have been confirmed and validated by Mott MacDonald.

Assessment of Risk

- 3.3.3 SCC has followed a process consistent with that undertaken in October 2013. In particular, this involved the assessment of costs by SCC working with Mott MacDonald as well as a full Risk Adjustment workshop.
- 3.3.4 We developed and facilitated a risk workshop on 13 March 2015 (and subsequent follow up meeting on 18 March 2015) working with SCC and its technical advisors focused on risks that differentiated Options 1 and 3 as part of the Updated VfM analysis. The risk adjustments calculated in this meeting were carried out in accordance with the HMT Green Book guidance as facilitated by Deloitte.
- 3.3.5 At the risk workshop, each of the updated input assumptions for each option was reviewed to establish whether a risk adjustment was appropriate. As part of this process the risk adjustments which were previously documented in the SCC risk work papers from the October 2013 quantitative VfM analysis (see Appendix 1) were also considered. The SCC risk work paper documenting SCC's latest approach to OB and risk adjustments is provided at Appendix 2.
- 3.3.6 The risk areas covered at the risk workshops in March 2015 for which OB and risk adjustments have been made in the Updated VfM analysis are listed below. The 'Risk Area' references refer to SCC's Risk Assumptions which was provided to SCC and their technical advisors on 1 April 2015 as updated to reflect SCC's comments (refer to Appendix 2). The SCC Risk Assumptions set out that SCC and their technical advisor should review the OB and risk adjustments as detailed in Table 3.3.7 to ensure that they are comfortable that all risks deemed to be significant have been discussed and, if appropriate, have been adjusted for. We have worked alongside SCC in developing the Risk Assumptions and SCC has confirmed that the Risk Assumptions reflect all the appropriate risks in respect of the quantitative VfM analysis undertaken for the options.
- 3.3.7 The total increases in costs due to the risk adjustments applied by SCC are £45.8 million to Option 1 and £99.5 million in Option 3, a net difference of £53.6 million. Table 3.3.7 details the NPV impact of the individual risk adjustments on the different options. In addition, as there is a relationship between the risk adjustment applied to Merchant EFW and the cost of landfill, any adjustment to landfill gate fees or tax will also effect Merchant EFW costs. Due to this relationship, the risk adjustments applied to landfill gate fees and tax also increase the costs of Merchant EFW in Option 1 by £16.0 million and Option 3 by £28.9 million, a net VFM difference of £13.0 million.

Risk Area £m	Option 1 adjustment NPV	Option 3 adjustment NPV	Difference
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table 3.3.7 - March 2015 Risk Adjustments Summary - Source: SCC Risk Work Paper

Termination Costs

- 3.3.8 As advised by SCC, Option 3 is predicated on the basis that the current WDPA with SSL will

be terminated on a 'no fault' basis as advised by SCC and its legal advisors and that other contracts would be put in place. It was assumed that termination would occur on 1 May 2015. The basis for the calculation of the termination costs is set out in Schedule 9 (Compensation on Termination), Part 2 (Compensation on Termination – other than for Council Default or Contractor's Default) to the WDPA.

3.3.9 The calculation of the termination costs in Option 3 is based on estimates as provided by SSL or from the SSL Model and includes estimates in respect of [REDACTED] amounts that have been borrowed by SSL to fund capital expenditure, redundancy payments and losses reasonably and properly incurred by the Contractor as a direct result of the termination. This methodology has been informed by SCC's legal advisor (Simmons & Simmons) that a 'no fault' termination event should apply including [REDACTED] (see Appendix 2 of the October 2013 DoV Report). We have used the same formula to calculate the termination payment as was used in October 2013 based on advice received by Simmons & Simmons at that point. SCC has no reason to believe that this advice would have changed.

3.3.10

[REDACTED]

3.3.11 Recent experience of PFIs which have been terminated early demonstrates that the sponsor has been able to recover a loss of profits. As a result, the termination payment risk assumptions were reviewed and it was determined that the analysis should include a risk for loss of profits on equity invested to date (which was not included in the October 2013 analysis). It is envisaged that any termination would be subject to a negotiation with Sita.

In the risk workshop on 13 March 2015 and subsequent follow up meeting on 18 March 2015, in order to derive an appropriate risk adjustment, a three point estimate for termination payments was used:

- Lower and most likely case – based on the same calculation method used in October 2013 (but updated for the latest data assumptions); and
- Upper case – as above, but also including a return on assets deployed to date in the loss of profit calculation.

The calculation of estimated termination costs is included at Appendix 3. SCC has not provided any estimates of its potential costs so these are excluded from the Updated VfM analysis.

We reiterate the legal advisor's comments from the October 2013 DoV Report with regards to the estimated termination costs and that these are difficult to quantify until the Contractor makes its claim for such losses.

3.4 Quantitative VfM Analysis Considerations

3.4.1 The key issues that have been discussed with SCC, that it will need to consider when reviewing the quantitative Updated VfM analysis, are presented below.

- a) The SSL model and other models incorporating sensitivity analysis as provided by SSL in response to SCC requirements have not been subject to review by Deloitte. The SSL Model has been audited by Operis, however, their scope of work did not extend to a review of sensitivities. Details of financial models provided to SCC from SSL since the July 2013 Cabinet meeting are detailed in Appendix 5.

- b) Estimated 'no fault' termination costs for the purposes of the Updated VfM analysis are based on those provided by SSL on advice from SCC's legal advisors. There is no precedent on which to base the accuracy or completeness of these costs or to accurately represent SCC's exposure in the event of a no fault termination. Deloitte has not verified the accuracy or completeness of these costs.
- c) Estimated 'no fault' termination costs that have been considered for the purposes of the Updated VfM analysis only reflect estimated costs which would be incurred by SSL and do not reflect any additional costs which may be incurred by SCC (such as its own legal costs) in the event of a no fault termination event.
- d) The quantitative VfM analysis is subject to the final model audit report as instructed by SSL from its model auditors, Operis. A draft report has been issued by Operis which indicates that there are no material issues which may have a financial consequence, however, we draw SCC's attention to Appendix B of the Operis report which includes unresolved issues that appear as caveats to their report. The Operis final model audit report is expected from SSL in the second week of April 2015.
- e) We have presented the risk associated with ROC accreditation as a sensitivity and no risk adjustment has been made in calculating the risk-adjusted NPV of Option 1. This has been done on the basis of advice from SCC and its technical advisors that it is not possible to provide reasonable estimates for the probability of not achieving ROC accreditation. If this risk was to be included as a risk adjustment (in line with HMT guidance where such probabilities can reasonably be estimated), the overall risk adjusted NPV cost of Option 1 would be higher. Please see section 3.5.6 for details of sensitivities.
- f) We note that SSL has not documented the assumptions included in the SSL Model, which is typically considered as best practice (bringing greater transparency to the Model assumptions) and would otherwise provide an agreed set of underlying assumptions and calculation mechanisms between the parties

In the absence of an agreed set of documented assumptions, we strongly advise SCC to review the cost assumptions in the SSL Model and ensure that your technical advisors have also provided sufficient review and challenge to these.
- g) The financing solution remains unchanged from the previous report and therefore this should be referred to in conjunction with this report (see Appendix 1).
- h) Sita base the swap rate in the current financial on the average loan life of the senior debt provided. Sita treasury provided an indicative swap rate 1.72% from Bloomberg based on the estimated senior loan drawdown / repayment profile per NTP2 date 31 May 2015. In addition, Sita added a buffer of 43bps to this resulting in a total swap rate of 2.15% in the model. We understand that Sita will update the financial model for the actual rate at financial close.
- i) SCC and Mott MacDonald have reviewed the underlying technical assumptions in the latest version of the Model based on the provisions of the DoV. Mott MacDonald has stated that the operating costs for the Eco-Park facilities should be in the region of £1.3 – £2.6m per annum (in real terms) and the SSL model puts these costs at the higher end of this range. We understand that SCC is in discussion with Sita regarding these costs.
- j) SCC has modelled a Corporation Tax rate of 23% which is the rate that will apply (and has been enacted) throughout the project. However, further rate reductions have now been enacted with the Corporation Tax rates set to reduce further to 20% on 1 April 2015. Whilst SCC will benefit should the Corporation Tax rate rise above the 23% modelled (as any rise is SSL's risk), SSL will benefit from an immediate gain from the lower rates now enacted. SCC should therefore acknowledge that the Model does not reflect the enacted Corporation Tax rates. Our understanding is this is what has been agreed between Sita and SCC and this point cannot be re-opened.

3.4.2 Details of the key inputs and assumptions for Options 1 and 3 and the OB and risk adjustment assumptions as represented by SCC are provided in Appendix 2.

3.5 Quantitative VfM Analysis as at April 2015

3.5.1 This section sets out the outputs from the Updated VfM analysis of the SCC options under consideration in accordance with the assumptions and sources as detailed in paragraph 3.3.1 above and Appendix 2.

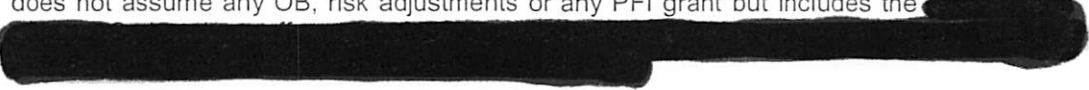
Non-Risk Adjusted Quantitative Analysis

3.5.2 The non-risk adjusted quantitative analysis of the SCC options, as set out below, indicates that Option 3 is c. £55.5m cheaper in NPV terms than Option 1 as measured over the time period from 1 April 2015 to 31 March 2040.

Option	Cost – NPV @ 1 April 2015 £m	Total Nominal Cost £m	NPV Difference from Option 1 (£m)	NPV Difference from Option 1 (%)
1	1,074.0	2,206.4	-	-
3	1,018.5	2,142.7	(55.5)	(5%)

Table 3.5.2 non-risk adjusted quantitative analysis - Source: SCC Options Spreadsheet

3.5.3 The non-risk adjusted quantitative VfM analysis of the SCC options as set out in table 3.5.2 does not assume any OB, risk adjustments or any PFI grant but includes the



Risk Adjusted Quantitative VfM Analysis

Option	Cost – NPV @ 1 April 2015 £m	Total Nominal Cost £m	NPV Difference from Option 1 (£m)	NPV Difference from Option 1 (%)
1	1,119.9	2,334.4		
3	1,118.0	2,380.7	(1.9)	(0.17%)

Table 3.5.4 Risk adjusted quantitative VfM analysis - Source: SCC Options Spreadsheet

3.5.4 We have prepared a detailed reconciliation that describes how the outputs from the October 2013 DoV report have moved to those summarised above. This reconciliation is included at Appendix 4 of this report.

3.5.5 The key deviations from the October 2013 report are increased capital and operating costs from SSL and changes in merchant gate fees for the AD and EFW facilities.

Sensitivities

3.5.6 We have considered further sensitivities on a similar basis to the October 2013 VfM analysis (based on DEFRA's guidance). Updated 'sensitivity analysis' financial models were

requested from SSL for various scenarios as set out below. These are also set out in the SCC risk work paper that we developed in conjunction with SCC and are included in Appendix 2. SSL has provided the sensitivity financial models which have not been reviewed by Deloitte. The outputs have been extracted from the SSL sensitivity models to provide an indication of the impact on the risk adjusted quantitative Updated VfM analysis on Option 1 only as set out above. The sensitivities outlined below will either increase or decrease the cost of Option 1 to SCC. These are for indicative purposes only and are not adjusted in the Updated VfM analysis of the SCC options.

Sensitivity	Impact on Option 1	
	Total Nominal (£m)	NPV (£m)
EPC Price Sensitivities		
EPC Price £90m	3.1	2.1
EPC Price £87.5m	8.7	5.9
EPC Price £85m	14.2	9.7
Electricity Sensitivities		
No ROCs income	(17.9)	(8.5)
£42 electricity price	(7.1)	(3.1)
No ROCs income and £42 electricity price	(25.0)	(11.6)
Financing Sensitivities		
+25 bps swap	(1.4)	(1.0)
- 25 bps swap and no buffer	3.8	2.6
No buffer	2.4	1.6

Table 3.5.6 Sensitivities Source: SSL Financial Model (see Appendix 5)

3.6 Quantitative VfM Analysis Conclusion

3.6.1 Based on extensive workshop discussions with SCC and its technical advisors, and in line with HMT guidance, where SCC could provide reasonable estimates, a range of assumptions have been incorporated and extrapolated to evaluate the risk-adjusted quantitative VfM analysis of the options. The outcome of this analysis is that the quantitative VfM difference between the risk adjusted Options 1 and 3 is 0.17% of total costs in NPV terms.

3.6.2 Our conclusion has not changed from our 2013 report (as at Appendix 1). The difference between the two options is marginal and significantly below 1%. Therefore we recommend that SCC's decision should not be based on the quantified VfM analysis alone, but should link to SCC's qualitative considerations of the two options, taking account of other significant value factors relating for example to legal, strategic, contractual and economic development in assessing overall value for money. We understand that SCC and its technical advisors are addressing the qualitative aspects of the VfM analysis and will be reported separately.

3.7 Future PFI Credits and claw-back of PFI credits received

3.7.1 To assist SCC understand the costs of the options for its affordability and budgetary assessment, SCC has requested that future PFI credits and claw-back of PFI grant received be set out based on the Risk-Adjusted Quantitative analysis provided in Section 3.5.3 above. SCC requested future PFI credits are presented as income in Option 1 and the claw-back of credits is shown as a cost to Option 3. The risk-adjusted quantitative analysis of

the SCC options incorporating the loss of future PFI grant indicates that Option 3 is £54.4 million more in NPV terms when compared to Option 1.

Option	Cost – NPV @ 1 April 2015 £m	Total Nominal Cost £m	NPV Difference from Option 1 £m	Total Nominal Cost Difference from Option 1 (£m)
1	1,063.6	2,255.8		
3	1,118.0	2,380.7	54.4	124.9

Table 3.7.2 Loss of PFI grant quantitative analysis - Source: SCC Options Spreadsheet

3.7.2 As outlined above, SCC also requested an assessment that assumes the claw-back of PFI grant already received. The analysis presents this adjustment as an additional cost of £9.0m (nominal) for each year of the evaluation period under Option 3.

The risk-adjusted quantitative analysis of the SCC options incorporating claw-back of PFI grant and the loss of the future PFI grant indicates that in this scenario Option 1 is £168.9 m less in NPV terms as compared to Option 3.

Option	Cost – NPV @ 1 April 2015 £m	Total Nominal Cost £m	NPV Difference from Option 1 £m	Total Nominal Cost Difference from Option 1 (£m)
1	1,063.6	2,255.8		
3	1,232.5	2,606.5	168.9	350.7

Table 3.7.3 Claw-back and loss of PFI credits quantitative analysis - Source: SCC Options Spreadsheet

3.7.3 Appendix 4 provides a detailed NPV bridge reconciliation between the October 2013 DoV and the current position.

APPENDIX 1

QUANTITATIVE VFM ANALYSIS AND FINANCIAL ADVICE – REPORT 31 OCTOBER 2013

Report issued as a separate document

ESTIMATED TERMINATION COSTS

Simmons & Simmons have confirmed that Schedule 9 (part ii) of the Project Agreement sets out the equation to be used under Voluntary Termination with a loss of profits element included:

Estimated No Fault Termination Costs including estimated loss of future profits (for Options 3 & 4)

This analysis has been prepared by Deloitte with the detail being provided by Sita and SCC

The old values are from the 2013 VfM report as detailed at appendix 1.

GU at Deed of Variation + Increase in GU since deed of variation + RP & Losses

where:	Source	£	Old values	£
GU at Deed of Variation	Contract	[REDACTED]	[REDACTED]	[REDACTED]
Increase in GU since deed of variation	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]
	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]
	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]
RP & Losses	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]
	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]
	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]
	Provided by SITA on 27/02/15	[REDACTED]	[REDACTED]	[REDACTED]

Figures to be confirmed by Sita/SCC

Quantification	£	£	
GU at Deed of Variation	[REDACTED]	[REDACTED]	See Specific Assumption 1
Increase in GU since deed of variation	[REDACTED]	[REDACTED]	See Specific Assumption 2
RP & Losses	[REDACTED]	[REDACTED]	See Specific Assumption 3
Loss of Profits	[REDACTED]	[REDACTED]	See Below
[REDACTED]	[REDACTED]	[REDACTED]	
Total	[REDACTED]	[REDACTED]	
Risk adjusted	[REDACTED]	[REDACTED]	

Specific Assumptions

- 1 This figure is fixed in Schedule 9 (part ii) of the Contract Variation
- 2 The actual amounts borrowed by the Contractor to fund capex was provided by SITA
The level of capex specified in the SCC Stage 2 approval was provided by SITA.
The budgeted level of increase in GU was provided by SITA
- 3 RP & Losses assumption was provided by SITA

Source: SCC Options Spreadsheet

LOSS OF FUTURE PROFITS CALCULATION

Assumptions made

This calculation is based on assumptions in the SSL Model and includes;

The NPV of 100% of the margins earned by Sita on sub-contracted services using a Sita's discount rate of [REDACTED] (this does not include other potential margins earned by Sita in relation to the Eco Park which could not be readily extracted from the Sita model); and

The NPV of the SPV project returns from the SSL Model – this assumes Sita's discount rate ([REDACTED]) and a base date of 1 May 2015. The NPV is pro-rated for the estimated non-Eco-Park element of the project returns – this allocation has been done according to the estimated proportion of capital expenditure attributable to the sites other than the Eco-park, as detailed in the calculations below:

Calculation

Sub-Contracted Services (Pass-through with margin)

	Margin	Total Nominal margin earnt by SITA	NPV of margin
Landfill Disposal	%	[REDACTED]	[REDACTED]
APCR Disposal	%	[REDACTED]	[REDACTED]
Bottom Ash Disposal	%	[REDACTED]	[REDACTED]
Bulk Haulage Costs	%	[REDACTED]	[REDACTED]
Solid Digestate	%	[REDACTED]	[REDACTED]
Third Party Composting	%	[REDACTED]	[REDACTED]
Insurances (ex Deductibles)	%	[REDACTED]	[REDACTED]
Other Waste Disposal	%	[REDACTED]	[REDACTED]
Handling Charge	%	[REDACTED]	[REDACTED]
Allington EFW	%	[REDACTED]	[REDACTED]
RDF	%	[REDACTED]	[REDACTED]
AEB Direct	%	[REDACTED]	[REDACTED]
Food Waste	%	[REDACTED]	[REDACTED]
Other Recovery (Variation Contract)	%	[REDACTED]	[REDACTED]

Sub Total (total nominal costs)

NPV Year	01-May-15
Annual discount factor	[REDACTED]
Monthly discount factor	[REDACTED]
NPV of Pass Through Margins	[REDACTED]

SITA Returns on ECO-Park + Existing Services

Project NPV (1 April 2012) - from Sita model	[REDACTED]
Ref: [Surrey FM2 Var6_v48b_11Yrs.xlsm]Workings!\$F\$1016	
Factor to restate Project NPV to 1 May 2015	[REDACTED]
Project NPV (1 May 2015)	[REDACTED]

Allocation of NPV to existing services

Total Eco-park capex	[REDACTED]	80%
Non-eco park capex	[REDACTED]	11%
Opening capex balance	[REDACTED]	9%

NPV allocation of Project Returns [REDACTED] %

Total Loss of Earnings (Returns + Operating Margins) [REDACTED]

Source: SCC Options Spreadsheet

OPTIONS ASSESSMENT – CHANGES SINCE OCTOBER 2013 DOV REPORT

Please find outlined below a summary of the changes to the options appraisal outputs since those presented in the October 2013 DOV Report.

Model version	Option 1	Option 3	Difference	Comments
October '13 model	(867,966,213)	(974,423,683)	6,517,470	
Current model (v12 011)	(1,119,859,763)	(1,117,994,902)	(1,864,861)	
Movement	(161,953,550)	(143,571,219)	(8,382,331)	
Movements in T				
Total movement in T payments	(63,302,353)	(42,227,173)	(21,075,180)	The increase in T is due to several factors: (i) the capital price increase from M-W and the associated borrowing costs for Sita increases Option 1 by c. £16 million NPV, (ii) the change to an inflated T (taken from the Sita model) compared to the use of a benchmark estimate in the Oct 2013 VFM increases the relative cost of Option 3 by c.£12 million, (iii) the eco-park costs post concession increases the cost of Option 1 by c. £13 million,
Changes in Market (AD and EFW price reductions)				
Change in merchant AD price	3,970,638	10,590,599	(6,619,961)	Merchant AD gate fees have reduced significantly since Oct 13. The combined gate & haulage fee has reduced from £... in the Oct 13 VFM to £... in the current analysis (both stated in 2015 prices).
Change in merchant EFW price	(2,147,240)	(10,874,976)	8,527,736	The costs of Merchant EFW are assumed to follow the costs of landfill. Therefore, the cumulative impact of landfill tax, haulage and gate fee increases also increases the costs of merchant EFW.
	1,823,398	(84,377)	1,907,775	
Changes due to evaluation period moving 2 years on				
Termination calculation increase	-	(13,331,844)	13,331,844	The increase in termination costs is largely explained as follows: (i) ... (ii) increase in opening contractor liability from capital expenditure at Earlswood (£3.5m) and NTP 1 capital expenditure (£6m) (iii) increase in expenditure in anticipation of the provision of services or the completion of works in the future - suspension costs £1.2m & Extended BEWA + Boiler Design Variation £0.5m
Other changes due to move in evaluation period	912,734	-	912,734	Other changes are the ... and 2 additional years of electricity income post concession
	912,734	(13,331,844)	14,244,379	
Changes in assumption made by SCC				
Contract costs (or equivalent)				
Change in assumption for bottom ash disposal	-	-	-	SCC have removed an assumption to add £10 per tonne to merchant EFW for haulage costs as this was considered to overstate the incremental costs of the additional EFW waste in option 3.
Extra EFW haulage cost	-	7,564,364	(7,564,364)	This is a direct input from SCCs waste monitoring spreadsheet, the decrease is a reduction in budgeted costs associated with market testing and waste auditing.
Waste audit team and market testing	1,113,116	-	1,113,116	Merchant EFW tonnages have increased significantly with over 905,000 more tonnes forecast to be sent to EFW over the 25 year evaluation period in both options. The slight differential impact is due to the assumed higher EFW gate fee in option 3.
Merchant EFW tonnage increase	(63,532,813)	(64,875,187)	1,142,374	
Pre-treatment EFW waste from gasifier	-	-	-	The inclusion of pre-treatment waste sent from the gasifier to Allington EFW. The large cost increase is due to landfill tonnages increasing by 923,000 tonnes since Oct 13. The small differential impact is the effect of reducing the risk adjustment applied to landfill tax, which has a greater impact on option 1 due to the additional APCR tonnage that attracts landfill tax.
Landfill costs	(76,413,547)	(77,502,326)	1,088,779	
Contract costs changes with less than £1 million differential impact	(6,121,556)	(9,889,800)	3,768,243	
Contract costs changes with no differential impact	25,714,061	25,714,061	-	
Total contract costs	(123,480,732)	(113,788,888)	(4,691,844)	
Recycling credits				
Total recycling credits	15,229,141	15,229,141	-	Change in input assumption from the SCC waste monitoring spreadsheet.
Central costs				
Total central costs	1,073,744	1,073,744	-	Change in input assumptions from the SCC waste monitoring spreadsheet.
Non-contract costs				
Total non-contract costs	18,464,696	18,464,696	-	Change in input assumptions from the SCC waste monitoring spreadsheet. £14 million relates to WCA recycling credit contributions, £1.3 million to other waste contingency and £1.0 million to clinical waste.
Changes in Sita model (not including T payments)				
Total changes due to Sita model changes (other than capital price increase)	(2,674,177)	(3,906,717)	1,232,540	Updates in the Sita model to insurance costs ... cost in option 1 and £2.3 million in option 3), commissioning costs (c. £1.3 million costs in option 1) and capital expenditure at Slyfield (£1.6 million in option 3).
Position before any changes to risk adjustments	(1,119,859,763)	(1,117,994,902)	(1,864,861)	

Source: Deloitte analysis based on SSL models

SSL FINANCIAL MODELS

Details of the financial models that SCC has received from SSL since the October 2013 DOV Report are set out below.

- (a) Surrey FM2 Var6_v48b_11Yrs.xlsm
- (b) Surrey FM2 Var3_v47e_25Yrs.xlsm
- (c) Surrey FM2 Var3_v47e_11Yrs.xlsm
- (d) Surrey FM2 Var3_v46_25Yrs.xlsm
- (e) Surrey FM2 Var3_v46_11Yrs.xlsm
- (f) Surrey FM2 Var3_v45d_25Yrs.xlsm
- (g) Surrey FM2 Var3_v45d_11Yrs.xlsm
- (h) Surrey FM2 Var3_v44e_11Yrs_EcoPark.xlsm
- (i) Surrey FM Var2_v41_11Yrs_3M Delay_fmt.xlsm
- (j) Surrey FM2 Var3_v44b_11Yrs_Earlswood.xlsm

We have assisted you in performing a high level review of the financial models received from SSL since the October 2013 DOV Report (version "Surrey FM Var2_v41_11Yrs_3M Delay_fmt.xlsm" being the final SSL model which was used for the quantitative VfM analysis included in the October 2013 DOV Report).

Please note, Deloitte has not audited the financial models received from SSL, we have only reviewed them at a high level to ascertain the assumption changes between them.

Please note that the differences highlighted below are draft based on our initial review of the updates in the v48 SSL model and set out the increase in the Actual Unitary Charge as compared to the costs provided by Sita in the financial model used for the October 2013 quantitative VfM analysis:

Base Case

Annual Unitary Charge Breakdown		Difference v41 to v48 (£)
Tonnage Payment	T	(28,321,933)
Landfill Tax & Allowances	L	837,377
HWRC Process Payment	P1	(297,446)
Gasifier/AD Process Element	P3	1,358,778
Sub-Contracted Activities	O	(5,504,186)
Other Waste Element	OW	-
Commissioning payment		(1,235,252)
Deductions	D	-
TOTAL IMPACT ON AUC		(33,162,662)

Source:Deloitte analysis based on SSL models

Due to the following changes:

Summary of increase in AUC	£
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Commissioning phase costs	1,102,399
Disposal costs	755,915
Landfill tax paid	(837,377)
Other variable cost	3,677,756
Haulage cost	86,329
Capital expenditure	18,111,019
Electricity revenue	2,681,713
Electricity revenue (commissioning)	4,213
Non contract waste - income plug escalation	36,129
Delay Costs	2,989,093
Total	33,162,662

Source: Deloitte analysis based on SSL models



In this document references to Deloitte are references to Deloitte LLP. Deloitte LLP is the United Kingdom member firm of Deloitte Touche Tohmatsu Limited (“DTTL”), a UK private company limited by guarantee, whose member firms are legally separate and independent entities. Please see www.deloitte.co.uk/about for a detailed description of the legal structure of DTTL and its member firms.

© 2015 Deloitte LLP. All rights reserved.

Deloitte LLP is a limited liability partnership registered in England and Wales with registered number OC303675 and its registered office at 2 New Street Square, London EC4A 3BZ, United Kingdom.

© 2015 Deloitte LLP. All rights reserved.