



Gloucestershire's Incineration Costs - Is there a better way? -

An analysis of Gloucestershire County Council's waste incinerator contract with Urbaser Balfour Beatty (UBB) with focus on value for money in the current and predicted future waste market.

Public Version

Executive Summary

This report is written by Community R4C a not for profit Community Benefit Society registered with the FCA. Following the recent disclosure of the full contract and Information Tribunal ruling, Community R4C has commissioned two consultants not associated with CR4C, and drawn on contributions from other independent experts, to provide evidence on the incinerator contract between GCC and UBB.

Main Findings

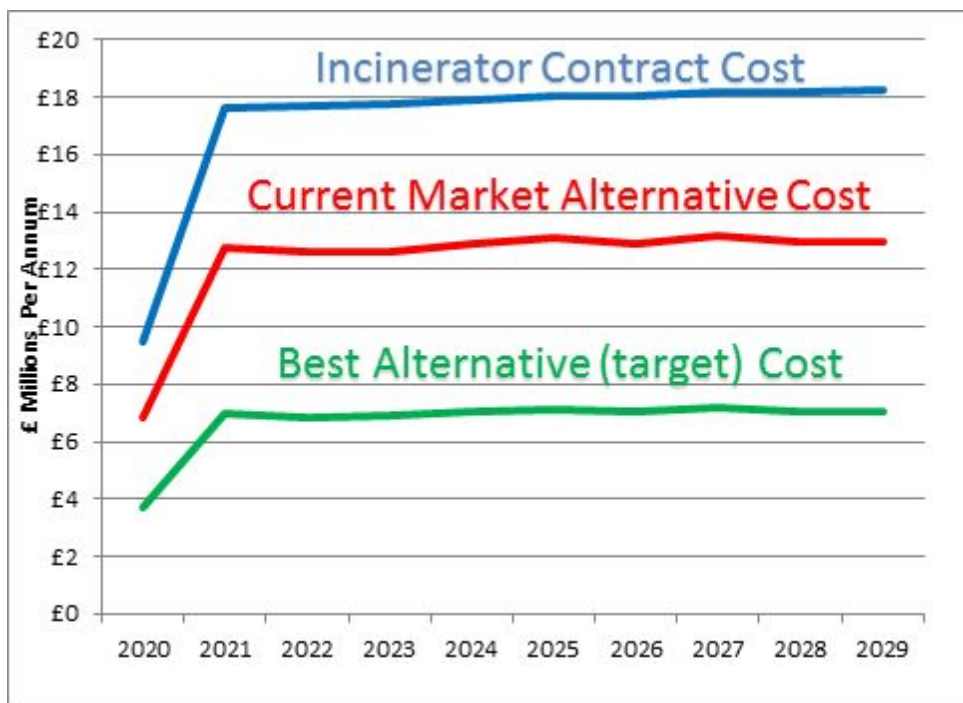
The report's main findings are that:

1. The incinerator contract can only be shown to be value for money given unrealistic assumptions about the future waste market and only by comparing it with landfill and no other alternative waste disposal methods.
2. The contract will in reality cost the county an estimated £4.7 million per year more than existing alternatives.
3. The contract's pricing structure discourages recycling and waste reduction and stifles competition and innovation.
4. The cancellation costs for terminating the contract are much lower than previously stated by the council and could be covered by funds already committed.
5. The contract fails to achieve best value as required by law.
6. The contract fails to treat waste as high up the waste hierarchy as economically achievable, also required by law.

In particular we found that:

- The contract is very expensive over the first half of contracted operation, justified with the hope of savings later on.
- The overall value for money case made for the incinerator contract relies on unrealistically high waste forecasts and assumes no improvements in recycling or waste reduction efforts.
- Waste reduction would result in higher costs per tonne, despite it being public policy and in fact a matter of law to reduce waste and increase recycling.
- The financial benefit of the Electricity from Waste part of the contract is significantly lower than claimed by the council.

- Contract cancellation would at present cost an estimated £36m instead of the £100m claimed by the council. Capital commitments already made by the council towards the project would cover this cost.
- The contract pricing structure is anti-competitive and establishes a de facto exclusivity in the market.
- Cheaper alternatives are available now, with capacity in nearby facilities.



Contents

[Executive Summary](#)

[Introduction](#)

[Community R4C](#)

[The report](#)

[Background](#)

[The Contract](#)

[Contract Structure](#)

[Contract Cost](#)

[Other Contract Issues – Electricity / Power Pricing](#)

[Contract Termination Costs](#)

[Value For Money](#)

[Immediate VfM in Today's Market](#)

[Whole Life Value for Money and Risk](#)

[Factors Affecting Value For Money In the Contract](#)

[Waste Arisings](#)

[The problem with long-term PFI-type contracts](#)

[Policy and Regulatory Framework](#)

[Alternatives in the Current and Future Waste Market](#)

[Future Pricing of Alternative Plants](#)

[The Importance of A Competitive Market and Formal CMA Complaint](#)

[Conclusion, Recommendations and Next Steps](#)

[Appendices:](#)

[Appendix 1 - Report by Steve Burnett](#)

[Appendix 2 - report by Vervus Waste Consultants](#)

[Appendix 3 - Complaint to Competition and Markets Authority](#)

[Appendix 4 - Factors Affecting Value for Money](#)

1 Introduction

1.1 Community R4C

Community R4C is a community led, not for profit Community Benefit Society registered in 2016. Our objectives are:

The protection and preservation of the environment for the public benefit by:

(a) the promotion of waste reduction, re-use, reclamation, recycling, use of recycled products and the use of surplus;

(b) advancing the education of the public about all aspects of waste generation, waste management, waste recycling and the circular economy; and

(c) the promotion of such other activities and initiatives that contribute to and stimulate the development of a local circular resource economy.

We are not allied to any political party, and our 170 shareholder members come from all walks of life. Above all we aim to be a positive force for change, providing solutions to the waste problem, inspiring others to do the same, and creating the environment and opportunity for a circular economy to thrive.

1.2 The report

Community R4C commissioned independent consultants to analyse the incinerator contract and the wider waste market. Their reports are included as appendices. The main report summarises and references both these and other independent sources.

- The report explains the **background** to Gloucestershire's residual waste project, leading to the contract with UBB.
- It **analyses the contract**, with a particular emphasis on the lack of value for money.
- It **outlines existing alternatives** in the wider waste market that provide better value for money and use different technologies.
- It **examines projections on waste arisings**, showing that the variations since the inception of the residual waste project are already affecting the business case.
- It makes **predictions on future trends**, reflecting on how these would affect both the contract with UBB and alternatives.

2 Background

The Council's Residual Waste Project has a long history going back to 2005 and beyond. A thorough and well-documented commentary can be found in GlosVAIN's Proof of Evidence to the Planning Public Inquiry in 2013¹. A concise background is also available in the recent ruling by the First Tier Information Tribunal by Judge Shanks.²

The following is a key timeline of events:

- An early (private) political decision was made by the Council's ruling party in 2005 to go for waste incineration as the preferred residual waste option.³
- The reference bid, submitted by GCC to Defra in 2008 in order to secure PFI funding, was modelled using the Javelin Park site and Energy from Waste technology. The model assumed no heat off-take (going against GCC's previous options analysis of technologies, and against the objectives of the Waste Hierarchy).
- Half the Javelin Park site (5.1 ha) was bought by GCC in late 2008 for £7.4m - **more than the owners had paid a couple of years previously for the whole 11.2 ha site.** □
- By going for a 'technology neutral' procurement process, GCC shut down any public debate on waste options. The process remained secretive throughout. The OJEU notice was issued in early 2009.
- Defra withdrew PFI funding in 2010 "*on the basis that, on reasonable assumptions (the project) will no longer be needed in order to meet the 2020 landfill diversion targets set by the European Union*"⁴ □ GCC carried out a strategic appraisal and in March 2011, despite a 5,000 strong petition opposing the scheme, decided there was a VfM case (based on landfill as a comparator) to continue with the residual waste procurement process.⁵
- On 12 September 2012 the Council's Cabinet agreed to contract with UBB for an EfW plant at Javelin Park. The Business Case for this decision (called Annex 4) was considered to be commercially confidential and only released recently, along with the Contract, as part of the Information Tribunal decision.⁶
- The Waste Core Strategy - the planning document against which the planning application for the Javelin Park incinerator would be judged, was adopted on 21 November 2012, after the contract had been agreed.
- The contract was signed in February 2013, less than 4 weeks before consideration of the application at Planning Committee. GCC's own Planning Committee unanimously

¹ <http://www.programmeofficers.co.uk/posl/documents/Gloucester/Proofs/GV/GV2.pdf>

² <https://drive.google.com/file/d/0B5qzJROt-jZ0ek04SmkyaklqbDdOaloyaU9fNkM0LVIIISXVR/view>

³ GlosVAIN proof of Evidence para 15

⁴ <https://www.gov.uk/government/news/changes-to-pfi-programme>

⁵ <http://www.programmeofficers.co.uk/posl/documents/Gloucester/CD12/CD12.21.pdf>

⁶ <https://drive.google.com/file/d/0B5qzJROt-jZ0ek04SmkyaklqbDdOaloyaU9fNkM0LVIIISXVR/view>

rejected the application on 21st March 2013. The matter was 'called in' by the Secretary of State.

- A 6-week planning Inquiry was held between November 2013 - January 2014. In January 2015, the Secretary of State, Eric Pickles, reversed the decision of GCCs planning Committee and granted planning permission.
- Because of the significant delay, the contract, even though signed, had to be renegotiated outside of any competitive pressure as the procurement process had ended⁷. In November 2015 the Council's Cabinet agreed a "*£17 million one-off financial contribution to the residual waste project, funded from revenue reserves to mitigate the cost of delay in the annual revenue budget for the project over 25 years.*"⁸
- On 18th February 2015, a petition signed by 7,600 people to terminate the contract was submitted to GCC. At an Emergency meeting, the Council debated a motion to do just that with immediate effect, but the motion was lost by 24 for and 27 against - a closely split vote. During the debate, Cllr Theodoulou told councillors that the choice was between "*The energy from waste solution (which) would provide £150 million worth of savings and the motion before members, which would incur cancellation costs up to £100 million*"⁹, but provided no data to substantiate these claims. These claims were questioned at the time, and more recently by the Judge at the Information Tribunal. The recently released Contract indicates that the claims were incorrect.
- In March 2015, campaigners submitted a request under Freedom of Information for the full contract with UBB and the Business Case (Annex 4 of the September 2012 Cabinet report). GCC subsequently released a heavily redacted version in May 2015 and campaigners appealed to the Information Commissioner's Office for full disclosure.
- The ICO decision notice on 8th October 2015 required GCC to "Disclose the withheld information to the complainant."¹⁰ GCC appealed this decision and it therefore went before a Tribunal in late 2016. **GCC spent over £200,000 defending their right to secrecy.**
- The Tribunal's decision on 10th March 2017 required that nearly all the redacted information be released because they ruled that public interest overrides commercial interest in virtually every aspect of the contract. Judge Shanks stated in para 27: "*During the hearing in September 2016 the Tribunal expressed some incredulity that it could possibly cost £100 million to cancel a contract worth some £500 million over 25 years at a stage when construction had not even started.*" And para 61 "*at the time of the requests in January to March 2015 the controversy was particularly intense and there was a danger that the whole Contract would have to be*

⁷ See Information Tribunal ruling para 25 "In the meantime, because of the time that had already elapsed since the contract was signed, the Council had had to request a "revised project plan" from UBB, which was the subject of negotiations between the parties in 2015".

⁸<http://glostext.gloucestershire.gov.uk/documents/s26635/Item%207%20-%20Financial%20Monitoring%20Report%20November%202015.pdf>

⁹<http://glostext.gloucestershire.gov.uk/documents/g8062/Printed%20minutes%20Wednesday%2018-Feb-2015%2010.00%20County%20Council.pdf?T=1>

¹⁰ ICO Decision Notice 8 October 2015 Reference: FER0579974

terminated at a cost, according to the Council, of up to £100 million. At that stage, in our view, the Council's obligation to act transparently was particularly strong as was the public interest in full disclosure of the exact position in relation to the compensation payable in so far as the Contract contained relevant provisions."

- On Tuesday 21st March, Community R4C submitted a complaint to the Competition and Markets Authority on the basis that the pricing structure in the contract, involving huge fixed costs for 25 years and unfair market pricing, has the effect of foreclosing all competition and preventing technological innovation (See Appendix 3)
- On March 22nd, Cllr Theodoulou, when asked for a further breakdown of alleged savings from the contract, maintained that "*he was not sure what public interest that would serve*"¹¹
- Works to build the incinerator on Javelin Park site commenced in November 2016 and are still at a relatively early stage, with anticipated completion date in 2019. There is therefore a real urgency in resolving the VfM case, since termination costs as outlined in this report will only increase. Also GCC is committed to paying £ 30m on the 'readiness date' and action needs to be taken well before that date

¹¹<http://www.gloucesterreview.co.uk/article.cfm?id=102389&headline=Hollywood%20actor%20joins%20incinerator%20protest§ionIs=news&searchyear=2017&action=validate>

3 The Contract

3.1 Contract Structure

Appendix I of this report provides an independent analysis of the Contract between GCC and UBB.

In summary, the contract provides for UBB to fund, build, own and operate an incinerator at Javelin Park in Gloucestershire to treat Gloucestershire's residual waste. The facility will also be able to process similar waste from Commercial and Industrial and other third parties. GCC is the Waste Disposal Authority for Gloucestershire and it commits to paying UBB to process its residual waste¹² for the next 25 years. It does this in the main through paying a "gate fee" for waste that it sends to the plant.

In the UBB contract the gate fee is banded. Band 1 is the primary band and carries a relatively high gate fee cost of £146.36 (2011¹³) per tonne, which GCC has committed to paying for a minimum 108,000 tonnes per annum (tpa), at a cost of £15,806,880, index-linked for 25 years.

The contract also includes two further bands for gate fee pricing. Band 2 is the cost that the Council will pay on the balance of its residual waste (i.e. anything above 108,000 tpa). It carries a very low gate fee of just £15 per tonne (2011), considerably less than the "recycling credit" the County Council is obliged to pay District Council's for diverting waste from disposal through recycling initiatives. (currently £56 per tonne)

The contract therefore makes it financially attractive to discontinue any separate collection or other recycling schemes that cost more than £15 per tonne (2011, indexed at RPIX) and instead send the waste to the incinerator, since the majority of the cost has already been paid through the Band 1 charge. This further works against the requirements to collect/treat waste higher up the 'waste hierarchy'.

3.2 Contract Cost

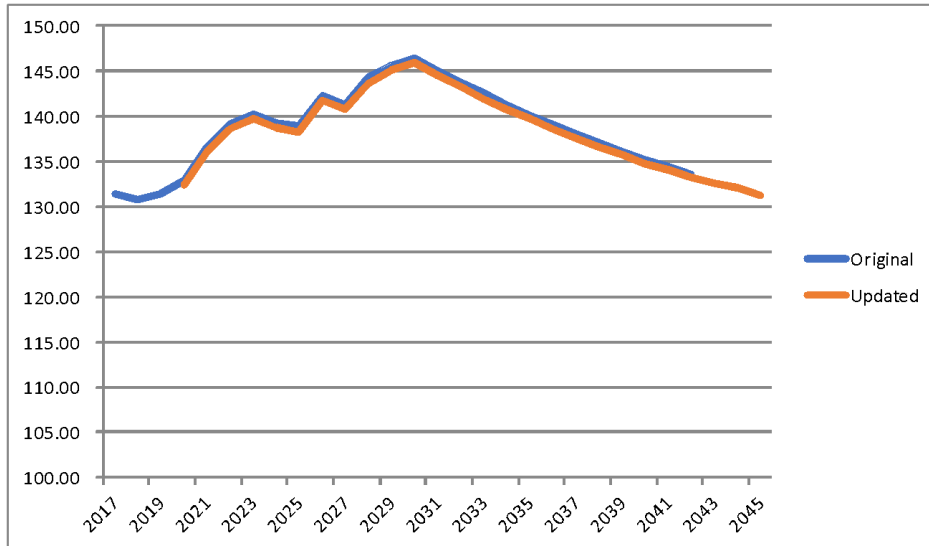
The County has forecast its future residual waste¹⁴. From these and the contract structure an average gate fee per tonne can be calculated and is plotted below

¹² The waste collected by Waste Collection Authorities (the District Councils) from households in Gloucestershire that has not been source separated by the householder as recyclable material. Commonly referred to as 'black bag' waste

¹³ The Band 1 gate fee has a low indexation rate applied, effectively 0.33% pa compared to an assumed RPIX of 2.5%.

¹⁴ See Appendix 4, para 4.1.1

Average Gate Fee: Original as of 2013; Updated as of 2017 (See Appendix 1)



In later years residual waste has been assumed to grow by 2% per year, with no improvement in recycling or waste reduction. This would increase the proportion of waste in the cheaper price band, thereby reducing the average cost per tonne. If residual waste **reduces**, however, perhaps as a consequence of higher levels of recycling, the average gate fee will **rise** towards the £148.80 (2017) price of Band 1, or even higher if the residual waste after recycling in Gloucestershire reduces below 108,000 tpa (this is certainly possible over this timescale, see Appendix 4 Section 1) .

The County is currently paying an average gate fee to Cory (the current landfill contractor) of approximately £113¹⁵ .

The Council's historical position has been that initial high costs are justified by savings that may accrue later in the plant's lifetime. On the Council's own figures the point at which the contract cost for residual waste treatment will first become less than the equivalent cost for landfill is 2030 so the financial case for the contract is that savings from that point forward will more than compensate for the increased short term cost on a whole-life cost basis. This is analysed in more detail in section 5 of this report.

Steve Burnett, in his report included here as Appendix 1, has calculated the cost of the contract, so this can be compared to alternative costs. He has taken as his baseline the assumptions included in the GCC's own assessment of value for money done in 2012¹⁶ . The table below summarises GCC's own calculated cost of the contract; Steve Burnett's modelling of the contract using the same base data (labelled Recalc) and which he found produces a **significantly higher result** than that presented to the Council's Cabinet; and the comparable cost to landfill used by the Council at the time.

| | 2013 Est | 2013 Recalc | Landfill Est |
|----------------|-----------|-------------|--------------|
| Unitary Charge | £410.590m | £477.958m | - |

¹⁵ This is simply calculated as the waste sent to landfill 146,706 tonnes in 2015/16 divided by the amount spent on landfill that year - £16,658,000 . The actual pricing structure will be more involved than this.

¹⁶ Officers report to the cabinet, September 2012 Annex 4

| | | | |
|------------------------|------------------|------------------|------------------|
| Non-PFI charges | £25.119m | £25.119m | £25.119m |
| Other Landfill charges | £4.553m | £4.553m | £552.558m |
| Capital Contribution | £10.245m | £10.245m | - |
| Total | £450.507m | £517.875m | £577.677m |

He further shows that at today's prices, 2017, the total contract cost will be £537.604m, £87m more than originally claimed. This is once again compared to landfill costs, which have also increased, but, as will be explained later on in this report, **landfill is no longer a credible comparator** in the waste field, as it is being phased out, and alternative and cheaper processes are coming into the market.

3.3 Other Contract Issues – Electricity / Power Pricing

The contract includes a secondary mechanism which may give additional benefit to the Council. This allows GCC to purchase all the electricity generated by the plant at a market realistic price of £44.85 / MWh, indexed by RPIx. Should electricity prices go up by more than this, as many analysts predict, the council benefits. In addition the council will have attached significant value to certainty on forward prices. However an increasing number of commentators observe that the rise of renewables and the differential pricing that future legislation may impose (the incinerator has a very high carbon footprint compared to renewables such as solar or wind) may in fact result in this not delivering value: we simply do not know.

Steve Burnett (appendix 1) forecasts the benefit of the power purchasing agreement significantly lower than figures used in the council's 2012 justification of this contract.

NPV (2011) of Savings Over 25 Years Estimated from Purchasing Electricity from UBB¹⁷

| | Contract | Market | Savings |
|------------------|----------|---------|---------|
| 2012 Estimate | £70.3m | £119.0m | £48.7m |
| Updated Estimate | £63.4m | £88.6m | £25.2m |
| Updated 2015 NPV | £80.3m | £112.2m | £31.9m |

These projected savings are based on long term assumptions and forecasts taken over the full 25 years of the contract so are clearly speculative in their nature. Any benefits will likely start relatively low with the bulk of the benefit in later years, if at all.

3.4 Contract Termination Costs

The contract has provision for termination at various stages, voluntary termination by the County is always an option. The compensation to be paid on any such termination are set out in the contract, more detail is set out in appendix 1. It is worth noting that the fall in Sterling following the Brexit vote significantly reduces the compensation to be paid due to the benefit of a currency hedge.

¹⁷ See appendix 1 for more detail

**Indicative Estimate of Termination Costs at April 2017,
Based on Updated 2016 Agreement**

| | Amount |
|---|---------------|
| Repay outstanding debt | £40m |
| Currency hedge (gain) | (£12m) |
| Interest hedge (prudent estimate) | £5m |
| Other (redundancy, contingency and general) | £3m |
| Total | £36m |

The County has committed a total of £30M as a capital contribution to the project, an initial £13M committed in 2013, with a further £17M committed in November 2015. This capital would normally be paid on completion of build, so is sitting on account until this point. In addition the County paid £7.4M for the land at Javelin Park and this remains a capital asset.

If these figures are correct the **cost of termination can be covered by capital already committed to the UBB project, which would mean there is no annual expenditure budget impact of the termination payment.**

4 Value For Money

4.1 Immediate VfM in Today's Market

The analysis of the contract pricing (appendix 1) shows that in today's terms the average gate fee for GCC waste is £132 per tonne. Because of the High Band 1 price, this average price is higher if the price is recalculated based on GCC actual residual waste which is lower than was forecast in 2013.¹⁸

Appendix 2 shows today's spot prices at existing facilities with spare capacity in neighbouring counties. They are all cheaper than the Contract:

| Operator | Facility Name | Postcode | Transfer Cost | Gate Fee | Total Cost | Total Capacity | Committed Capacity | Un-Committed Capacity |
|--------------------------------|-------------------|----------|---------------|--------------------|------------|----------------|--------------------|-----------------------|
| Suez | Avonmouth EfW | BS35 4GG | £12.71 | £97** | £110 | 400,000 | 347,000 | 53,000 |
| PandaGreen | Avonmouth MBT | BS11 9FG | £12.71 | NO CAPACITY | N/A | 120,000 | 120,000 | 0 |
| MES Environmental | Wolverhampton EfW | WV1 1QB | £14.44 | £98 | £112 | 115,000 | 105,000 | 10,000 |
| Viridor | Ardely EfW | OX27 7PH | £14.44 | £92 | £106 | 300,000 | 270,000 | 30,000 |
| MES Environmental | Dudley EfW | DY2 8JW | £14.44 | £98 | £112 | 99,000 | 80,000 | 19,000 |
| Veolia | Tyseley EfW | B11 2BA | £14.44 | £87 | £101 | 350,000 | 335,000 | 15,000 |
| The C&S Waste Disposal Company | Coventry EfW | CV3 4AN | £14.44 | £55 | £69 | 250,000 | 175,000 | 75,000 |
| Hills Waste Solutions | Northacre MBT | BA13 4WD | £14.44 | £107 | £121 | 60,000 | 60,000 | 0 |
| Viridor | Cardiff EfW | CF24 5EN | £14.44 | £95 | £109 | 350,000 | 91,000 | 259,000* |
| Veolia | Four Ashes EfW | WV10 7DG | £14.44 | £90 | £104 | 300,000 | 288,500 | 11,500 |

It is useful to compare costs to the Council that would have occurred had the contract and facility been in place in 2015/16 and compare to the alternatives then available, based on the 146,706 tonnes of residual waste which was landfilled by GCC via their contract with Cory.

| Waste Treatment Option | Average Gate Fee £ / tonne | Additional Cost Of Contract % | Annual Cost to GCC | Additional Cost of UBB Contract £pa |
|--|----------------------------|-------------------------------|--------------------|-------------------------------------|
| UBB Contract | £132 | | £19,365,192 | |
| Cory Landfill Contract (current) | £113.55 | 16.3% | £16,658,000 | £2,707,192 |
| Typical Alternative: Average local alternative plus transfer, see appendix 1 | £101 | 32% | £14,670,600 | £4,694,592 |
| <i>For simple comparison the following have an assumed transfer cost of £12.71 pt (as per Suez, Avonmouth)</i> | | | | |
| WRAP average MBT (similar to average EfW) inc transfer of £12.71 | £97.71 | 35% | £14,424,515 | £4,940,677 |

¹⁸ In 2015/16 GCC landfilled 146,706 tonnes (see appendix X). At this rate the average contract price would be c£140

| | | | | |
|---|--------|------|-------------|--------------------|
| WRAP Pre-2000 EfW £58 + transfer of £12.71 | £70.71 | 87% | £10,373,581 | £8,991,610 |
| Best Alternative – Target Price for Local R4C Type Facility. (no net transfer cost) | £55 | 138% | £8,068,830 | £11,296,361 |

On a current pricing basis the contract represents a significant increase in cost to the Council which will have an immediate adverse impact on budgets. We estimate that, based on 2015 data, the Council could free up £4,695,000 per annum (32%) for other services by simply choosing a negotiated arrangement with other neighbouring facilities, rather than contracting to use the UBB facility.

This saving should increase towards £10M pa if the Council can find ways to move towards the best value achieved in other districts, or the best local alternative as planned by R4C.

Note also that should all districts achieve the levels of recycling recently achieved by Stroud District Council the amount of residual waste in the County would approximately halve, a saving on current costs of around £8M pa. With the incinerator contract in place the saving of this improved recycling would be relatively low (£700k), the contract price will still be £15.9M due to the 108,000 tonnes minimum commitment.

4.2 Whole Life Value for Money and Risk

Sustainable development is a public policy requirement, as set out for example in the National Planning Policy Framework (Department for Communities and Local Government). This emphasises the need of “meeting the needs of the present without compromising the ability of future generations to meet their own needs”¹⁹

This principle has been very powerfully put by leading commentators such as Jonathan Porritt of Forum for the Future in his eight principles for decision makers²⁰, for example principles 5,6,7 “Avoid Infrastructure Lock-In”, “towards a circular economy” and “future proofing”.

The table below considers a number of risks and uncertainties and their potential impact on the long term Value for Money of the contract.

¹⁹ National Planning Policy Framework “International and national bodies have set out broad principles of sustainable development. Resolution 42/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The UK Sustainable Development Strategy Securing the Future set out five ‘guiding principles’ of sustainable development: living within the planet’s environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.”

²⁰ <http://communityr4c.com/blog/jonathon-porritt-gives-8-principles-decision-makers>

| Uncertainty / Risk | Contract Assumption for Claimed Benefit | Commentary | Balance of Risk in favour of the Contract |
|--|---|---|--|
| Lock in / Length of contract | 25 year contract from date of first operations. (now 2019 – 2044) | This is a very long lock in period with the backdrop of a rapidly changing market and legislative framework. This lock in runs counter to sustainability principles. Appendix 4.2 | Strongly adverse |
| Residual Waste Arisings | Erratic increase in residual waste until 2022, 2% pa increase from then | Contract justification based on unrealistic and excessive assumptions of future waste arisings, already shown to be significantly wrong. Effort towards a circular economy and higher recycling rates, such as that achieved recently by Stroud District Council would reduce the amount of residual waste significantly to well below the minimum 108,000 tpa contract obligation with a very negative financial impact . Appendix 4.1 | Strongly adverse |
| Electricity Pricing | Prices increase by more than RPIx | Most forecasts have electricity pricing increasing by more than the rate of RPIx, although recent changes have seen downward pressure on price, and we may see penalties on relatively high carbon electricity such as that produced by the incinerator. The potential benefit is most significant in later years (beyond 2030) and would be marginal before that. Benefit could potentially be derived by other means, such as forward contracting, or building wind/solar capacity. | Favourable |
| Pricing of alternative treatment options | 20% increase in cost of alternatives compared to the incinerator | There is a substantial increase in treatment capacity, excess capacity in a number of neighbouring European countries, and declining residual waste through moves towards a circular economy. The capital cost of new plants means marginal and future pricing will be lower. The marginal operational cost of facilities is well below current market prices. This all gives significant downward pressure on price. Appendix 4.4 and 4.5 | Strongly adverse |
| Changes in Legislation | No adverse changes | Legislative and regulatory changes are likely to favour moves towards a circular economy, this would increase costs on the incinerator contract or reduce waste below the 108,000 contract minimum. See appendix 4.3 | Strongly adverse |
| Political / Social | No change in Council policy | There is considerable public opposition to the contract, and widespread, cross party opposition. Future administrations may take a different or fresh view in the light of fresh information, and seek to cancel the contract. Examples of other council areas where this has occurred are in Appendix 4 para 4.2.3. Cancellation is less expensive now than in the future. | Strongly adverse |
| New Technology and Circular Economy | Nothing better emerges for 25 years | See appendix 4.4 which shows that new technology is already here; and Appendix 4.3 which shows that moves to the circular economy will soon be implemented. | Strongly adverse |

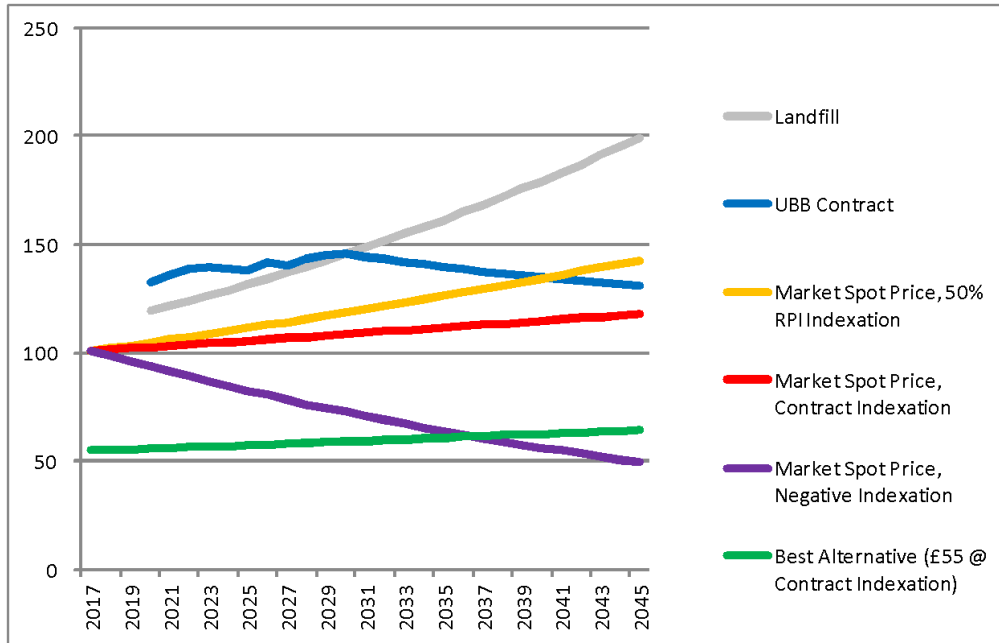
The Council has historically justified this commitment by comparison to landfill pricing. The contract is forecast to show savings versus landfill from 2030 on forecast volumes, but will be more costly to the Council for the next thirteen years (the first ten years of operations).

As stated earlier, we do not think Landfill an appropriate comparator, particularly that far into the future. Instead we have taken current market spot prices and projected these forward, with costs increasing at the rate given for band 1 in the contract. The high capital cost of

facilities means that operational costs will increase significantly less than inflation (capital costs do not increase, and once paid off produce a significant operational cost saving) and there are many downward pressures on price.(see Appendix 4.5)

We have plotted the impact of possible alternative forward pricing scenarios.

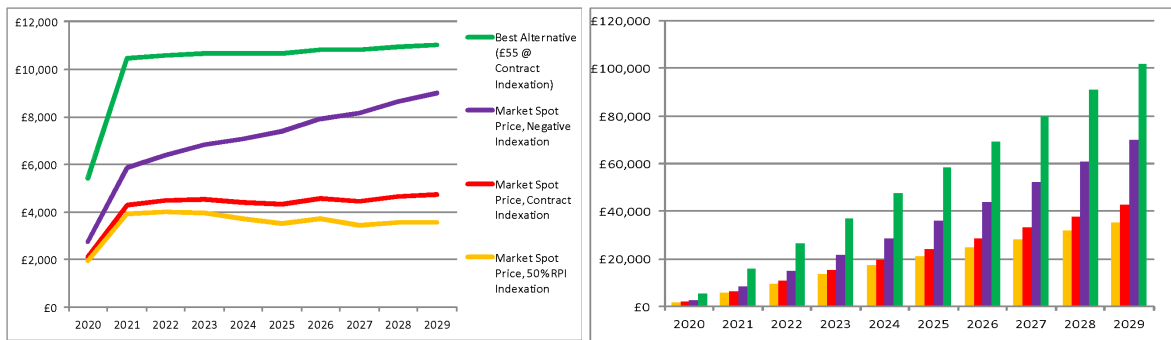
Figure: Indicative Cost per Tonne Comparison, UBB Contract vs Landfill and Out-of-County Alternatives



These figures assume no reduction in waste arisings, which as shown in section 4.1 is an imprudent assumption. Nevertheless even in this case you can see that the base case assumption (based on current spot price and contract levels of indexation) the cost per tonne of the contract is always higher than market alternatives - even into the 2040's. Even compared with landfill the contract is significantly more expensive until 2030 - when landfill is phased out anyway.

If the contract was cancelled and alternative treatment used - even with no reduction in residual waste we would see very significant savings as illustrated below.

Figure: Likely Savings from Alternatives to Incinerator Contract, First 10 Years



(£k, annual and cumulative)

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|--|--------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Best Alternative (£55 @ Contract Indexation) | £5,423 | £15,903 | £26,497 | £37,161 | £47,823 | £58,506 | £69,329 | £80,156 | £91,107 | £102,135 |
| Market Spot Price, Negative Indexation | £2,751 | £8,630 | £15,032 | £21,851 | £28,930 | £36,313 | £44,224 | £52,397 | £61,039 | £70,057 |
| Market Spot Price, Contract Indexation | £2,106 | £6,408 | £10,889 | £15,433 | £19,841 | £24,167 | £28,753 | £33,205 | £37,869 | £42,610 |
| Market Spot Price, 50% RPI Indexation | £1,955 | £5,880 | £9,895 | £13,877 | £17,611 | £21,153 | £24,869 | £28,330 | £31,916 | £35,476 |

The comparison in a simple value for money case is stark. Over ten years compared to the Contract the Council would save £42.6M simply by buying capacity at market spot price (assuming same rate of indexation as the contract). If instead the Council pursued best local alternatives such as R4C the saving versus the contract would be over £100M over the ten years.

The key point to note is that the contract locks out these potential savings, future generations and future administrations do not have these options if the contract is continued.

There are many current examples of residual waste levels which if replicated in Gloucestershire would result in considerably less than 108,000 tpa. The circular economy plans of Community R4C would, if successful, achieve a massive reduction in residual waste to less than 15,000 tpa.

5 Factors Affecting Value For Money In the Contract

Appendix 4 sets out a number of factors affecting VfM factors in detail, summarised here.

5.1 Waste Arisings

The supposed value-for-money of the Javelin Park incinerator contract depends heavily on the accuracy of waste projections. The pricing structure is such that less waste means higher cost per tonne. So, are the waste projections realistic?

5.1.1. GCC has continuously over-predicted **total** household waste arisings, and these wrong predictions are then compounded year on year.

5.1.2 The contract assumptions predict that **residual** waste will rise at a rate of 2% from 2030 onwards. This unsubstantiated forecast is well in excess of any independent forecast (the highest we can find is 0.5% from this time, most show decreases). **It would require a reduction in the level of recycling and other waste reduction measures which is counter to council, national and EU policy and the duty of the Council under UK Law²¹**

5.1.3 The contract also predicts a relatively low recycling rate which if bettered would make the contract even worse VfM. Should all districts reach the performance recently achieved by Stroud District Council, total residual waste going to the incinerator would be around 70,356 tpa, well below the 108,000 tpa minimum of the contract, making the cost a very high £224 per tonne, twice current market price.

5.2 The problem with long-term PFI-type contracts

The Contract with UBB is basically a PFI contract, and as Judge Shanks commented in the recent Information Tribunal ruling,

“the PFI model is itself controversial, with legitimate concerns expressed about bad value for money, opacity and the tendency to load expenditure on future generations.”

There is much evidence that PFI contracts do not offer Value for Money, including reports by the Treasury Committee:

“We have not seen evidence to suggest that this inefficient method of financing has been offset by the perceived benefits of PFI from increased risk transfer... We do not believe that PFI can be relied upon to provide good value for money without substantial reform.”

The Public Accounts Committee found that

“PFI contracts typically last 25-30 years and may be inappropriate for the waste sector where technology is continually evolving and the amount of waste that will be produced in the future can be hard to predict”

²¹ The Waste (England and Wales) Regulations 2011 (Regulation 12)

Many councils have come to realise that their long-term waste contracts do not represent Value for Money, and have terminated them after just a few years. These include: Norfolk, Thurrock, Sheffield City, Greater Manchester and Peterborough. Reasons given centre on flexibility and better value for money, despite having to meet cancellation costs.

The lesson for the GCC contract with UBB are clear. The risk of this contract becoming a burden in just a few years is great, and has not been properly considered when assessing value for money.

5.3 Policy and Regulatory Framework

It is very likely that Government policy and the regulatory framework will favour recycling, waste reduction and the circular economy possibly through financially linked targets or new taxation.

5.3.1 The EU's Circular Economy Package will be EU law before Brexit happens, and commentators believe it will therefore be incorporated into UK law. The Package includes strong recycling targets, requirements for extended producer responsibility schemes, and requirements on packaging amongst many other things.

5.3.2 A recent EU Communication on Waste Incineration cautions against investment in this technology, partly because of the lack of flexibility and the impact on other waste management technologies which will take waste higher up the waste hierarchy. It recommends bringing in incineration taxes, phasing out support for existing Energy from Waste (EfW) plants, and having a moratorium on any new ones.

5.3.3 A new EU plastics strategy to reduce plastic use, and increase recycling and reuse will have a major impact on energy produced by EfW plants.

5.3.4 There is good evidence that the UK will continue to follow the EU path towards the circular economy.

5.3.5 Long before 25 years is out, regulation will insist on removal of some components that are currently acceptable in residual waste treatment (landfill/incineration), with the usual step change of taxation likely first. Pre-treatment is inevitable as a means of enforcing the removal of these items from the waste stream. The risk to the Javelin Park incinerator and its viability is obvious – and the GCC and its constituents will inevitably pick up a large part of the extra costs.

References can be found in appendix 4.3

5.4 Alternatives in the Current and Future Waste Market

There are many alternatives to the Javelin Park facility which would offer financial and environmental benefits compared to proposed incinerator.

5.4.1 Landfill is not a long-term option for waste management. Landfill is generally more expensive than alternatives however, and it was the only comparator used in the Business Case - a fundamental error. Landfill is being phased out and will no longer be an option for

residual waste within 10 years (it will still be used for inert waste).

5.4.2 Other existing Energy from Waste Plants offer better value than the contract with UBB. **Appendix 2, shows clearly that capacity is available today in existing neighbouring plants at a much cheaper rate than the Contract**

5.4.4 Mechanical Biological Treatment (MBT) plants have become a proven, price competitive and effective alternative for dealing with residual waste, taking waste further up the waste hierarchy than incineration. Most separate out recyclables, separate out the organic fraction for e.g. anaerobic digestion and then create Refuse Derived Fuel (RDF) (a fuel burnt efficiently in incinerators) with the rest.

5.4.5 Improvements and innovation in waste technology are happening very fast, and Appendix 4 highlights a number of examples of new approaches already operating in the market.

5.4.6 We also highlight technologies that are likely to be available within the next 5 years. These include the R4C MBHT plant, supported by Community R4C, which will improve on the MBT concept. By adding washing of waste and a heat process, the plant produces a very clean, > 90% renewable biomass fuel pellet which can be used very efficiently in bio boilers to produce heat.

5.5 Future Pricing of Alternative Plants

There are a number of downward pressures on the medium term pricing of alternatives waste treatment options

Indexation of prices is expected to be low. Capital cost of plants does not increase with inflation (it is usually a fixed cost of depreciation and other finance costs). Once paid off there is no capital related cost significantly reducing the operational cost of a plant. Capital / finance costs typically make up more than half of the annual costs of capital intensive projects such as incinerators.

Although landfill, or more precisely Landfill Tax, has some effect on prices throughout the sector, this will cease once landfill stops taking unsorted residual waste, and other drivers affecting gate fees, including competition, have driven prices down already. These include:

- Low prices at older plants that have paid off their capital borrowing, for example the EfW plant in Coventry. This effect will increase as more and more established plants become debt-free.
- Excess capacity in Northern Europe (eg Germany, Netherlands, Sweden) with gate fees for RDF of between €30 and € 55 pt.
- Operational cost of alternative plants such as MBT and newer technology. The cost to run an efficient MBT plant are typically £30-£50 pt.
- Increase value of the recyclates and materials recovered by advanced MBT plants over time as more technical recycling / material recovery/refining options become viable. (for example the plastic technology from Recycling Technologies in Swindon)

- Overcapacity of residual waste treatment, predicted as early as 2020.
- Reduced residual waste and increased recycling

5.6 Social and Environmental factors

In evaluating the public benefit of proposals such as these within a sustainable procurement framework, the Duty of Best Value requires consideration of the triple bottom line, that is the **economic, environmental and social impact** of the facility.

There is substantial and ongoing public opposition to the plant (4350 planning objections for example), and significant engagement with the community in the Community R4C based in Stroud, Gloucestershire. This, not-for-profit Community Benefit Society demonstrates exactly the type of sustainable social value that can be encouraged by working with communities, rather than imposing expensive, inflexible and unwanted infrastructure on them.

Many objections on environmental grounds were raised at the planning meeting, and later in the public enquiry (of UBB's appeal of the unanimous planning decision). The inspector ruled that these could not be considered since they were outside of the scope of the stated reasons for rejection of the planning application, yet the environmental concerns are very real. They include:

- Climate change impacts
- Lack of pre-treatment
- Lack of use of heat
- Low R2 / energy efficiency figure
- Emissions
- Visual impact, harm to AONB
- Failure to deliver renewable energy / excessive cost of new electricity capacity compared to wind etc
- other

6 The Importance of A Competitive Market and Formal CMA Complaint

A healthy local market for waste treatment and alternatives that avoid waste, is very important and has a fundamental bearing on Value for Money and the long term sustainable economy, in economic, social and environmental terms. This is because it allows more cost effective local solutions to emerge which can reduce the cost to the Council. It also facilitates new business and encourages innovation, which allows environmental and social needs to be better met - a core requirement of sustainable development. Community R4C is committed to stimulating a thriving local circular economy and this needs a fair market to work effectively.

With the aid of the Environmental Law Commission we have commissioned independent legal work by an eminent barrister²² which has concluded that the incinerator contract will create abuse of local market dominance to compromise competition. This is in breach of competition law and on behalf of Community R4C the barrister has submitted a formal complaint to the **Competitions and Markets Authority, CMA**. This states specifically that the contract will cause

- (1) the foreclosure of competitors/alternative technologies, and*
- (2) the (concomitant) distortion/prevention of technological innovation*

The following summarise the anti-competitive elements of the contract:

The pricing structure prevents competition

The pricing structure ensures that the council pays a very high gate fee for the first 108,000 tonnes pa. Any additional waste is charged so cheaply, that no other processor could compete at that price.

“The pricing structure combines with the assured ‘base tonnage’ to ensure de facto exclusivity (now and during the life of the contract).”

Punitive termination terms have been put in place that exacerbate/guarantee exclusivity.

Length of contract - although not itself anti-competitive, it means that any anti-competitive features in the contract last such a long time that they have a major impact.

²² Duncan Sinclair, 39 Essex Chambers

7 Conclusion, Recommendations and Next Steps

This report shows conclusively that GCC's contract with UBB offers a very bad deal for council taxpayers:

Independent **legal** review has found that the contract is not compliant with competition law. The pricing structure in the contract, involving huge fixed costs for 25 years and unfair market pricing, has the effect of foreclosing all competition and preventing technological innovation. It also prevents GCC from any future flexibility in responding to changes in the waste market through reduced waste, new technology and anticipated cheaper prices. A complaint has been made to the CMA who may declare the contract void.

The contract acts as a disincentive to waste reduction and further recycling, making it cheaper to burn waste than recycle it. **It contravenes the statutory obligations of the waste hierarchy as set out in the Government's 2011 Waste regulations.**

Modeling from an independent financial and market review has found that the contract will cost taxpayers at least an extra **£4.7m** per year compared to alternatives currently available.

Cancellation costs are even now only a third of those suggested to Councillors in 2013 and are **affordable** through using capital funds already committed as a capital contribution to UBB, and through the sale of land at Javelin Park. Cancellation would 'reuse' committed budgets and would not impact on revenue budgets, thus the £4.7m pa savings would be available to use for GCC other priorities.

There remain serious public health and environmental impact concerns with the incinerator that could be entirely avoided with the alternative approach endorsed by CommunityR4C.

Recommendations and next steps

GCC must re-examine this contract and seriously consider other avenues, before any more public money is wasted. They should call an immediate halt to work on the Javelin Park site to limit financial liability pending CMA & Value ruling. They should undertake an independent re-examination of contract and alternatives to find a better, cheaper way of dealing with our waste aligned with the circular economy.

Appendices:

[Appendix 1 - Report by Steve Burnett](#)

Analysis of Gloucestershire County Council Payments for Waste Treatment

Stephen Burnett has over 20 years of wide-ranging practical experience as an environmental economist and project analyst. He has recently been supporting some of the UK's largest waste companies as lead financial modeler / joint project manager in their bids for PFI/PPP contracts and project updates post-award. Outside the UK, he has acted as a techno-economic analyst of waste and renewable projects across Europe for the European Investment Bank and Shell. He has also been working independently with various developers in these sectors to help finance their ventures and to establish them commercially. His particular expertise lies in technical, economic and financial appraisal of waste management and renewable energy projects, and the development of business plans for new waste management facilities / services.

[Appendix 2 - report by Vervus Waste Consultants](#)

Analysis of the current waste market

This report looks at:

The costs and capacities of alternative residual waste treatment available in the current market that could be used with immediate effect. The likely future costs and access to residual waste treatment that will/may become available in the coming years as capacity increases and new facilities come online, including predictions, and impact of, over capacity. Forecast diversion levels.

[Appendix 3 - Complaint to Competition and Markets Authority](#)

Complaint submitted on behalf of Community R4C by barrister Duncan Sinclair

[Appendix 4 - Factors Affecting Value for Money](#)

CommunityR4C's evidence to support the main report.