
Group Oil/Electric to Biomass Heating Conversions – Full Business Case

1.0 EXECUTIVE SUMMARY

The main purpose of this report is to provide for consideration, a Full Business Case to progress with oil/electric to biomass heating conversions at 10 sites and makes recommendations for the way forward. It establishes the rationale for reducing from 16 sites to the said 10 sites as follows:

- Ardrishaig Primary School
- Inveraray Primary School
- Kilcreggan Primary School
- Park Primary School, Oban
- Rosneath Primary School
- Tarbert High/Primary School
- Tiree High/Primary School
- Tobermory High/Primary School
- Lochgilphead Joint campus (NPDO)
- Glencruitten Hostel, Oban

The Council is asked to:

- Note that the Full Business Case estimates that prudential borrowing capital funding of circa £2,015,905 is required for the 10no. biomass projects at Ardrishaig PS, Inveraray PS, Kilcreggan PS, Park PS, Rosneath PS, Tarbert HS/PS, Tiree HS/PS, Tobermory HS/PS, Lochgilphead Joint Campus (NPDO) and Glencruitten Hostel to proceed to the implementation/delivery stage.
- Note that the 5 no. biomass projects at Arrochar PS, Dunbeg PS, Port Charlotte PS, Port Ellen PS and Tighnabruaich PS were deemed unaffordable during the tender assessment process and an alternative low carbon heat solution may be more beneficial at Aqualibrium resulting in 6 no. projects not being included in the list of properties to be considered for progression to the implementation/delivery stage.
- Note that the Full Business Case estimates aggregated simple payback period of 12 years for the 10no. projects and the payback reduces to 11.4 years if the internal project management fees are excluded. After this period, the net annual revenue savings will provide an income stream to the Council.
- Note the position regarding the anticipated degression in Renewable Heat Incentive tariff and the need to have projects delivered by the end of March 2016 to secure a known tariff rate for a 20 year period.

- Agree that based on the impact, affordability, deliverability and risk for the 9no. projects at Ardrishaig PS, Inveraray PS, Kilcreggan PS, Park PS, Rosneath PS, Tarbert HS/PS, Tobermory HS/PS and Glencruitten Hostel these projects should progress to the tender acceptance/implementation stage.
- Agree that based on the impact, affordability, deliverability and risk for the project at Lochgilphead Joint Campus that delegated authority be afforded to the Executive Director of Customer Services to accept that element of the tender only once an NPDO contract variation has been agreed.

Group Oil/Electric to Biomass Heating Conversions – Full Business Case

2.0 INTRODUCTION

- 2.1 This paper provides, for consideration, a Full Business Case to progress with oil/electric to biomass heating conversions at 10 sites and makes recommendations for the way forward.

3.0 RECOMMENDATIONS

The Council is asked to:

- 3.1 Note that the Full Business Case estimates that prudential borrowing capital funding of circa £2,015,905 is required for the 10no. biomass projects at Ardrishaig PS, Inveraray PS, Kilcreggan PS, Park PS, Rosneath PS, Tarbert HS/PS, Tiree HS/PS, Tobermory HS/PS, Lochgilphead Joint Campus (NPDO) and Glencruitten Hostel to proceed to the implementation/delivery stage.
- 3.2 Note that the 5 no. biomass projects at Arrochar PS, Dunbeg PS, Port Charlotte PS, Port Ellen PS and Tighnabruaich PS were deemed unaffordable during the tender assessment process and an alternative low carbon heat solution may be more beneficial at Aqualibrium resulting in 6 no. projects not being included in the list of properties to be considered for progression to the implementation/delivery stage.
- 3.3 Note that the Full Business Case estimates aggregated simple payback period of 12 years for the 10no. projects and the payback reduces to 11.4 years if the internal project management fees are excluded. After this period, the net annual revenue savings will provide an income stream to the Council.
- 3.4 Note the position regarding the anticipated degression in Renewable Heat Incentive tariff and the need to have projects delivered by the end of March 2016 to secure a known tariff rate for a 20 year period.
- 3.5 Agree that based on the impact, affordability, deliverability and risk for the 9no. projects at Ardrishaig PS, Inveraray PS, Kilcreggan PS, Park PS, Rosneath PS, Tarbert HS/PS, Tiree HS/PS, Tobermory HS/PS and Glencruitten Hostel these projects should progress to the tender acceptance/implementation stage.
- 3.6 Agree that based on the impact, affordability, deliverability and risk for the project at Lochgilphead Joint Campus that delegated authority be afforded to the Executive Director of Customer Services to accept that element of the tender only once an NPDO contract variation has been agreed.

4.0 DETAIL

- 4.1 **Background:** The Council's Renewable Sourcing Strategy (RSS) highlighted biomass solutions as one of the key prospects to deliver renewables (heat) solutions with associated cost and carbon savings. As part of this strategy, potential sites for biomass conversion were identified and included in a tender intended to deliver annual financial savings in the range £150k - £200k and a carbon saving of circa 1,000 Tonnes.
- 4.2 **Renewable Heat Incentive (RHI):** RHI is currently available to financially support renewable heat projects, but tariff rates are subject to a government degression strategy and access to the tariffs are expected to be time limited. Currently, projects delivered by the end of March 2016 will secure a known tariff rate for a 20 year period. The outlook beyond that point is uncertain and the government spending review on 27th November 2015 is expected to inform on future support levels for these types of project.
- 4.3 **Tendering Exercise:** To achieve the financial and carbon savings referred to in Section 4.1, 16 no. projects/sites were identified for biomass solutions from the RSS. The sites are as follows:
1. Ardrishaig Primary School
 2. Inveraray Primary School
 3. Kilcreggan Primary School
 4. Park Primary School, Oban
 5. Rosneath Primary School
 6. Tarbert High/Primary School
 7. Tiree High/Primary School
 8. Tobermory High/Primary School
 9. Lochgilphead Joint campus (NPDO)
 10. Glencruitten Hostel, Oban
 11. Arrochar Primary School
 12. Dunbeg Primary School
 13. Port Charlotte Primary School
 14. Port Ellen Primary School
 15. Tighnabruaich Primary School
 16. Aqualibrium, Campbeltown

These sites were largely chosen as they were the council's largest remaining oil users or were electric heated sites with wet heating systems and oil and electric heating costs and associated carbon emissions are the highest of the heating fuel/ options available.

A tender exercise has been conducted using the Procurement Scotland biomass framework and a preferred bidder has been identified.

The tender submissions and subsequent evaluation has presented a range of simple paybacks for the sites identified. Based on some of the individual outcomes, it is only recommended that 10no. of the projects be taken forward i.e. properties 1 to 10 in the above list. Some projects that may have been deemed unaffordable on an individual basis have been included to take account of the following:

- Assisting the Council to contribute to Scottish Government emission and renewable heat targets associated with the Climate Change Scotland (2009) Act
- To support Council Carbon Management Plan carbon reduction efforts
- Fossil fuel costs are relatively low at present but that is not expected to be sustained over the 20 year life of the biomass solution and as fossil fuel prices increase the project payback reduces
- Fossil fuels are a diminishing use and their use is not sustainable
- The economies of scale associated with awarding a contract that include a combination of larger and smaller projects

5no. projects (properties 11 to 15 in the above list) were deemed to be unaffordable, as their individual simple payback based on capital cost alone was in excess of 30 years, which is in excess of the period over which the prudential borrowing would require to be repaid. As a result, other projects presented a better return/use of financial resource. The project at Aqualibrium has been appraised against an alternative low carbon heat solution and we are currently collaborating with Scottish Water and their preferred delivery partner to utilise heat pump technology to extract heat from the waste water/sewer network.

- 4.4 **Current Position:** The timeline for the project is being driven by the Renewable Heat Incentive (RHI) requirements to complete the project delivery by the end of March (assuming that there is significant RHI depression), so a Contract Award Recommendation Report has been signed off to allow the preferred bidder to progress with statutory consents.

Oil/Electric to Biomass Conversion projects are classified as Strategic Change and as a result there is now a requirement for their Full Business Case to be approved by Council prior to tender acceptance to comply with the Council's Capital Programme Planning and Management Guide.

The project at Lochgilphead Joint Campus requires an NPDO contract variation to be agreed with ABC Schools/MITIE and there is a risk that this will not be completed until after the date of the Council meeting in November. However the status of the other 9 sites is such that they are capable of progressing to the acceptance/implementation stage.

As all 10 sites are subject to statutory consents (planning permission, building warrant), there remains a risk that some of the individual sites might not be capable of being delivered by the end of March 2016. Should this circumstance arise, then projects will be prioritised to maximise the income to the Council through continual monitoring during the acceptance/implementation stage. The end of March date for delivery will not be an issue should RHI continue to be supported following the UK government spending review.

- 4.5 **Options:** To address the issues highlighted by the current position in Section 4.4 there is an option to delegate authority to Executive Director of Customer Services to accept the tenders in a phased manner on the basis that the payback period is no more than 10% longer than the current simple

payback period of 12 years.

- 4.6 The Full Business Case for the collection of projects is shown in Appendix 2 and is summarised in the following table:

Criteria	Group Biomass Heating – 10no. Projects	
FBC Impact Score	91.6%	(45.8/50)
FBC Affordability Score	62%	(15.5/25)
FBC Deliverability Score	83%	(10.4/12.5)
FBC Risk Score	84%	(10.5/12.5)
FBC Overall Score	82.2%	(82.2/100)
FBC Overall Rating	4(maximum)	
Funding Required	£2,015,905	
Net Annual Saving	£168,156	
Payback period	12 years	
Working life of major plant	20+ years	
Annual Carbon Reduction	988 Tonnes	

The payback period is calculated utilising a simple analysis based on the ratio of capital investment to net annual revenue savings (heat cost savings, plus RHI income). After the simple payback period, the net annual revenue savings will provide an income stream to the Council.

- 4.7 The Provisional Full Business Full Business Cases are scored using the assessment criteria and weightings as agreed by the Strategic Assessment Management Board and indicated in Appendix 3. The overall score is then rated in accordance with the following table.

Business Case Score	Rating
80% -100%	4 (Max.)
70% - 79%	3
60% - 69%	2
Less than 60%	1 (Min.)

Full Business Cases should attain a rating of 4 for them to be considered for progression to the implementation stage.

5.0 CONCLUSION

- 5.1 The Full Business Case for the 10no. projects achieves the highest possible rating of 4 in accordance with the Councils Capital Programme Planning and Management Guide.
- 5.2 The projects offer: a significant reduction in the Council’s carbon footprint (988Tonnes); reduced reliance on fossil fuels; and a cheaper fuel source with less price volatility.
- 5.3 In accessing the Renewable Heat Incentive, the project delivers an annual saving on heating costs of circa £168k per annum.

- 5.4 The projects have a solid collective simple payback of 12 years. After this period, the net annual revenue savings will provide an income stream to the Council.
- 5.5 An NPDO contract variation requires to be agreed with ABC Schools/MITIE and additional legal/management fees have therefore been factored in to enable MITIE to deliver the projects/variation. There is the risk that not all of this work will be completed by the date of the November Council meeting. Therefore members are asked to delegate authority to the Executive Director of Customer Services on the basis that once finalised the Full Business Case demonstrates a payback period of no more than 10% longer than the current simple payback period of 12 years

6.0 IMPLICATIONS

- 6.1 Policy - Failure to deliver the projects would inhibit delivery of the Council's 20% target reduction in carbon emissions.
- 6.2 Financial – There is a requirement to identify funding from prudential borrowing of £2,015,905 to deliver the 10no. oil/electric to biomass heating conversion projects. The project achieves a payback of between 11.4 years and 12 years depending on the inclusion of internal fees. After this period, the net annual revenue savings will provide an income stream to the Council.
- 6.3 Legal - Legal agreements are required where third parties are involved e.g. Lochgilphead Joint Campus (MITIE/ABC Schools).
- 6.4 HR - None
- 6.5 Equalities - None
- 6.6 Risk - As indicated within the risk section of the FBC in Appendix 2
- 6.7 Customer Service - None

Executive Director of Customer Services
Policy Lead: Councillor Walsh

7 October 2015

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APPENDICES

- Appendix 1: Biomass Heating Conversions – Proposed Site List
- Appendix 2: Full Business Case Oil/Electric to Biomass Conversions
- Appendix 3: Business Case Appraisal Assessment and Weightings

Appendix 1 Biomass Heating Conversions – Proposed Site List

Argyll and Bute Council																
Renewable Sourcing Strategy (RSS): Oil/Electric to Biomass Conversion (October 2015)																
	Site	Size (kW)	Tendered Project Capital Cost (includes Provisional Sums)	Planning Fee	Building Warrant Fee	Dayworks	Contingency (10% Capital Cost)	Contract Guarantee Bond	Total Tendered Capital Cost	Asbestos RFD Survey Estimated Cost (excludes works arising)	Third Party Management Fees (i.e. MITIE, legal + admin)	Internal Management Fee (5%)	Total Project Capital Cost (Excludes Business Case Development)	Payback Saving (£/annum)	Simple Payback (years)	CO ₂ Savings (tonnes/annum)
1	Ardrisaig PS	80	£ 116,827	Included	Included	£565	£11,739.15	£830	£129,960.64	£1,000	£0	£6,498	£137,459	£4,225.19	12.0	28
2	Rosneath PS	80	£ 117,577	Included	Included	£568	£11,814.51	£835	£130,794.93	£1,000	£0	£6,540	£138,335	£4,942.86		47
3	Glencruitten Hostel	201	£ 135,735	Included	Included	£656	£13,639.09	£964	£150,994.31	£1,000	£0	£7,550	£159,544	£14,473.48		71
4	Inveraray PS	130	£ 140,278	Included	Included	£678	£14,095.58	£997	£156,047.98	£1,000	£0	£7,802	£164,850	£7,164.53		40
5	Kilcreggan PS	130	£ 136,697	Included	Included	£661	£13,735.75	£971	£152,064.41	£1,000	£0	£7,603	£160,668	£7,489.77		42
6	Lochgilphead Joint Campus	800	£ 316,430	Included	Included	£1,529	£31,795.90	£2,248	£352,002.96	£0	£60,200	£17,600	£429,803	£60,468.12		273
7	Park PS	201	£ 145,920	Included	Included	£705	£14,662.51	£1,037	£162,324.29	£1,000	£0	£8,116	£171,441	£13,262.30		64
8	Tarbert HS/PS	300	£ 213,764	Included	Included	£1,033	£21,479.69	£1,519	£237,795.26	£1,000	£0	£11,890	£250,685	£20,044.80		98
9	Tobermory HS/PS	250	£ 181,041	Included	Included	£875	£18,191.58	£1,286	£201,393.58	£1,250	£0	£10,070	£212,713	£17,436.82		157
10	Tiree HS/PS	250	£ 161,730	Included	Included	£782	£16,251.15	£1,149	£179,911.65	£1,500	£0	£8,996	£190,407	£18,648.14		168
To Progress Site Totals:		2422	£1,665,999			£8,050	£167,404.91	£11,836	£1,853,290.01	£9,750.00	£60,200.30	£92,664.50	£2,015,904.81	£168,156.01		988
11	Arrochar PS	These sites were not taken forward														
12	Aqualibrium															
13	Dunbeg PS															
14	Port Ellen PS															
15	Tighnabruaich PS															
16	Port Charlotte PS															

Appendix 2 Full Business Case Oil/Electric to Biomass Conversions



ARGYLL & BUTE COUNCIL

FULL BUSINESS CASE FOR CAPITAL PROJECTS (2015/2016)

DEPARTMENT Customer Services

SERVICE Facility Services

Asset Type Varies

Asset Group Varies

Project Name: Oil/Electric to Biomass Conversions - Carbon Management Projects – Strategic Change

1. Executive Summary

Brief statement of what is proposed.

With the introduction of the Renewable Heat Incentive (RHI), there is an attractive opportunity to convert oil/electric sites to biomass. Argyll and Bute Council has worked in partnership with Carbon Trust (Scotland) in the preparation/implementation of a Renewable Sourcing Strategy (RSS) and one of the key considerations in the Strategy has been accessing the opportunities arising from renewable tariff incentives (unfortunately the government is constantly reviewing tariff incentive levels and these are subject to reduction).

An output from the conclusion of phase 1 of the RSS development has been the identification of preferred renewable technologies and the best sites to install them on (against the evaluation criteria of Impact/Deliverability/Affordability/Risk).

This proposal supports a multi-site biomass 'Strategic Change' carbon reduction project to make significant contribution to Council carbon reduction targets. This is an ambitious project – particularly in terms of scale and timelines (with installation by the end of March 2016 targeted to ensure RHI can be secured at a reasonable rate – there are currently no guarantees beyond that date).

This proposal is based on actual tender returns, eliminating a significant amount of financial uncertainty/risk. Tenders were invited using the Procurement Scotland biomass framework and a contractor design/build/maintain/operate solution has been progressed – thereby passing off performance risk to the contractor and ensuring that design solutions will be robust/reliable. A specialist consultant, who has supported other Scottish local authorities, using the same framework and solutions, was engaged to advise and contribute to the tender process, including evaluation.

This FBC is submitted on the basis that the projects concerned demonstrate excellent carbon reduction, reduced reliance on fossil fuels, offers a cheaper (with less price volatility) fuel source, can access RHI and offers a solid payback opportunity.

The do minimum option would be to ignore the biomass conversion proposal, continue with the existing oil fired/electric arrangements - with higher running costs and no substantial spend to save or carbon benefit.

There are a number of technical challenges and possible solutions when retrofitting biomass solutions to existing sites. Retrofitting biomass projects, especially on 'tight' sites, are not without risk and the choice of biomass fuel (e.g. wood pellet or wood chip), fuel delivery logistics and location of biomass store/plant etc. all need careful consideration. In this instance, the preferred bidder has proposed extensive use of wood pellet which presents them with a more reliable/consistent fuel supply – a key consideration when they have performance risk.

Biomass (wood pellet or chip assumed to be sourced from sustainable sources) is regarded as near carbon neutral and would therefore result in a near 100% carbon saving against oil/electric use. Biomass is cheaper than oil/electric and is a more local/sustainable resource. Oil, and particularly electric, have high carbon emissions factors.

The particular sites that most benefit from an oil/electric to biomass conversion will have a combination of the following:

- No gas grid connection available
- Significant oil user
- Significant electric user, especially where heating/wiring needs upgraded or an existing wet system exists
- Significant operational property

Argyll and Bute Council identified a total of 16no sites to consider for biomass conversion. From the list of 16no sites, it is only proposed that the following 10no. sites be taken forward as part of this FBC:

- Ardrishaig Primary School
- Inveraray Primary School
- Kilcreggan Primary School
- Park Primary School, Oban
- Rosneath Primary School
- Tarbert High/Primary School
- Tiree High/Primary School
- Tobermory High/Primary School
- Lochgilphead Joint campus (NPDO)
- Glencruitten Hostel, Oban

It is not proposed to take the following sites forward, mainly due to affordability:

- Arrochar Primary School
- Dunbeg Primary School
- Port Charlotte Primary School
- Port Ellen Primary School
- Tighnabruaich Primary School

It is not proposed to take the following site forward, due to prospects for an improved low carbon heat solution to be taken forward:

- Aqualibrium, Campbeltown

Note: these sixteen sites were considered without knowledge of future sales/transfers/closures etc of any building. It will be assumed that the Asset Management Board will confirm whether any specific sites should be removed from the proposal.

At a significant capital investment, this project offers:

- New carbon friendly heating source.
- Fuel cost savings (wood pellet/chip cheaper than heating oil/electric).
- Carbon emissions reduction - contribution of circa 988 tonnes CO₂ reduction
- Project payback and a return on investment.
- Less dependance on diminishing fossil fuels (e.g. heating oil)
- Move to a sustainable, locally sourced fuel source (wood pellet or chip).
- Reputational benefits.
- Learning opportunities.
- Access to external funding streams e.g. Renewable Heat Incentive.

The project summary is as follows:

- **10no. biomass projects**
- **2,422kW on installed renewable heat capacity**
- **988 tonnes CO2 savings per annum**
- **£168,156 revenue savings per annum (displacing oil/electric by renewable heat)**
- **Simple Payback of 12 years against a £2,015,905 capital investment (includes tender package, contingencies, fees)**

Supporting information is as follows:

Up to date knowledge from similar projects e.g. Kilmory Castle, Islay high School/Bowmore Primary School etc.

Specific feasibility studies for IBC:

Tiree HS/PS, Tobermory HS/PS, Carradale PS & Park PS by Pick Everard (November 2012).

Notes:

(1) Whilst this proposal promotes the Council's ownership of the plant/equipment, alternative procurement options are possible (e.g. a leasing type option would involve the Council entering into an agreement with community, non profit making or commercial partners to secure heat from an organisation who are responsible for the initial capital outlay, system maintenance and wood chip sourcing (or a combination of these)). The cost of the heat provision would obviously incorporate a charge to cover revenue and capital investment etc. The ongoing development of the Council's Renewable Procurement Strategy and conducting a Biomass Procurement Options Appraisal will inform the best options for future as it develops.

(2) The Council has set a target to reduce reliance on fossil fuels and this collection of projects would contribute.

(3) Renewables development projects are not promoted to replace the need for energy efficiency best practice projects.

2. Impact on Council Plans

These biomass projects link directly to the Councils Corporate Plan 2015-2017, 'Making Argyll and Bute a place people choose to live, learn, work and do business'. In particular, Key Strategic Priority 'Making Argyll and Bute a place people choose to work and do business'; 'We will use Council resources and facilities innovatively to generate income in order to protect and enhance services'. In terms of 'Making it happen', 'We will deliver our priorities by managing our resources and sharing resources, buildings and facilities where appropriate'. Specifically, the Council would be introducing renewable energy assets onto Council premises which will reduce energy costs/generate income (renewable heat incentive/feed in tariffs) and reduce carbon emissions.

At the outset of this project, these biomass contracts also linked to the *preceding Corporate Plan*:

Corporate Objective 2 - "Working together to improve the potential of our communities", and the associated corporate outcome of "The places where we live, work and visit are well planned, safer and successful".

Corporate Objective 3 - Working together to realise the potential of our area and the associated corporate outcome of "We make the best use of our built and natural environment"; "We contribute to a sustainable environment"; "We have reduced the carbon footprint of Argyll and Bute Council".

These projects are directly in line with the Council's **Carbon Management Plan** and are specifically put forward to address this particular outcome.

Corporate Objective 4 – Working together to improve the potential of our organisation and in particular “Our services are continually improving” by helping to ensure that council offices are functional and efficient thus providing staff with the correct environment within which to deliver services in line with the aspirations of the council and the expectations of the local communities.

These projects will also enhance the Council’s position with regard to national drivers such as:

- The Climate Change (Scotland) Act 2009 in contributing to reaching national targets for the reduction in greenhouse gas emissions (initially 42% reduction by 2020).
- Scottish Climate Change Declaration (Council is a signatory)
- CRC Energy Efficiency Scheme

Given the financial climate, this project supports the Council’s need to adopt the most prudent financial measures.

3. Affordability

This project is regarded as a 'spend to save' project and should present a strong case for investment . The capital investment proposed involves the conversion of heating fuel types to a less expensive, more carbon friendly option. It is the year on year reduction in fuel revenue costs, aligned to government renewable heat incentives (RHI), that make this project affordable – biomass (wood pellet or wood chip) 'traditionally' being cheaper than oil/electric.

The installation of biomass heating systems present the need for significant capital investment. Despite this, a reasonable project payback is projected - the extent of which is linked to a range of, often uncertain, external funding/pricing conditions e.g. fuel price volatility and RHI levels/availability.

Many Argyll and Bute Council sites are faced with a future of oil fired heating. There have been reminders in recent years of the market and supply chain volatility and rising costs of heating oil. Biomass not only offers a cheaper fuel alternative, but presents the possibility of a locally sourced fuel supply which is less exposed to rising prices, market volatility, refinery strike action and fossil fuel depletion.

The capital cost of the work is at circa £2,015,905 (including contingencies, fees etc) and would be recovered by a reduced revenue charge for heating (at circa £168,156 per annum – includes contribution by accessing the governments Renewable Heat Incentive. The project offers:

A simple project payback of circa 12 years (project cost of £2,015,905 divided by annual revenue saving and income of £168,156).

A carbon saving of 988 tonnes per annum would be delivered for a total investment of £2,015,905. This equates to a cost of £2,040 per tonne CO₂ saved.

These figures are evaluated against current, fairly cheap, fuel prices – there is therefore significant opportunity for this project to deliver a far higher level of benefit over it’s lifetime.

4. Deliverability

Refer also to Risk section.

This is an ambitious project – particularly in terms of scale and timelines.

Biomass installations have tended to receive negative publicity for various failings - mainly down to poor design and installation.

In this instance, a contractor design, build, maintain and operate solution is proposed. As the contractor takes performance risk, the design is expected to be robust/reliable. A specialist consultant with relevant experience of delivered projects was engaged to support the procurement exercise.

Feedback from other Scottish local authorities is that the preferred bidder is highly capable and runs their projects 'like a military operation'. Furthermore, much of the construction work will be conducted off site.

The ability to allocate suitable Argyll and Bute Council staff resources to support the project is important – to ensure good project management, challenge design and derive optimum experience/knowledge from the project.

A number of factors dictate that as early a start date as possible is achieved and these are:

- Start to accrue carbon and revenue savings as early as possible.
- Deliver Carbon Management Plan carbon reduction targets within stated timelines.
- Tackle project unknowns/uncertainties.
- Access Renewable Heat Incentive (RHI) in its current form (being subject to a government depression strategy).

5. Risk

See Risk Log Worksheet which sets out the chance, impact and mitigating actions re the following:-

- Difficulties with partners etc
- Failure to approve funding
- External funding assistance/income not available
- Planning/Building Control /Consent Issues
- Retrofit headaches
- Plant/Equipment premature expiry
- Revenue Savings not realised
- Scheduling issues
- Property Closure (or other affecting loan repayment)
- Higher than anticipated capital costs
- Unforeseen technical difficulties (including retrofit headaches)
- Poor Contractor Performance
- Poor Consultant performance
- FBC misses salient points
- Internal client concerns

Risk of not proceeding with the project:

- Council remains reliant on the volatile and generally rising price of oil/electric.
- Not taking benefit of cheaper biomass fuel prices and RHI.
- Leaving the Council reliant on a diminishing fuel source – which could mean lack of availability or unaffordability in the future (affecting business continuity).
- Public expectations affected - Council not taking the lead.
- Course of action not consistent with national/governmental targets - possible penalties.
- Failure to meet Corporate carbon reduction targets - project has been identified as a significant contributor to the Council's targets (circa 988 tonnes CO₂ per annum).

Argyll & Bute Council - Oil/Electric to Biomass Conversions (Carbon Management)			RISK ASSESSMENT/RISK LOG WORKSHEET					
Ref	Category	Risk Description	Chance	Impact	Score	Risk Level	Risk Lead	Mitigating Action
1	strategic & financial	Third Party Managed Site - Difficulties in facilitating relevant projects generally given contractual arrangements with ABC Schools/MITIE etc.	4	4	16	Red	Head of Service	This risk item is only relevant where the site selected has a third party facilities management provider (or similar). Bid is being made for capital funding, but NPDO Special Projects Team or others will be required to engage with stakeholders at an early stage to confirm whether this project could be delivered; variation to be agreed.
2	strategic & financial	Access to RHI is not forthcoming or is significantly reduced	4	4	16	Red	Property Manager	Confirmations on income levels to be confirmed before major milestones. There remains a concern that RHI could be reduced from present levels at various intervals (precedents set).
3	strategic & financial	Capital funding for programme is not approved	3	5	15	Red	HOS, Property Manager	Programme is in support of Corporate Plan (including carbon management programme delivery), Improvement Plan etc. Spend to Save project so savings generated.
4	statutory	Planning/Building control issues	3	5	15	Red	Property Manager	Early consultation shall take place with the statutory authorities. Generally straightforward projects and planning permission has been forthcoming on other projects. Key consideration is air quality. Projects could potentially be dropped from consideration where planning permission is not granted. Building control issues similar.
5	project	Retrofit headaches	3	3	9	Amber	Property Manager	The project is fairly straightforward/uncomplicated in scope - new biomass boilerhouses will generally be constructed off site and installed slightly away from existing premises. Interconnection with existing heating systems presents the risk of some heating related problems - to be considered fully prior to project delivery. Appropriate staff resource to be afforded to support and supervise the project. Asbestos surveys to be undertaken, but only limited areas affected. Ecological issues are not likely to be relevant on this project.
6	financial	Plant/equipment expires prematurely (within expected life cycle)	2	4	8	Amber	Property Manager	Suitable quality of biomass plant/equipment needs to be procured - with a strong emphasis on warranties (unlikely to be valid for the project whole life).

7	financial	Predicted revenue savings not realised	2	3	6	Yellow	Property Manager	This project is only proposed on the basis that it represents a solid spend to save investment. Oil/Electricity prices can take significant swings and are difficult to predict. There is an assumption here that oil/electricity prices will not drop (not thought to be a risky assessment) and there will continue to be strong carbon (a national grid with higher renewable energy generation levels could see carbon emissions factors for electricity reduced) and cost benefit in installing biomass systems. Issues affecting RHI levels are covered separately above. Participation in the CRC energy efficiency scheme or the introduction of other forms of carbon taxation supports project viability.
8	operational	Scheduling Issues	2	3	6	Yellow	Property Manager	Risk mitigated by each Project Plan which will detail Project Manager, Design Team, Specialist Consultant and Cost Management functions to deliver the programme. Some term time working will be inevitable given a tight works programme.
9	strategic & financial	Property Closure etc (affecting borrowing repayment)	2	3	6	Yellow	Property Manager	Asset Management Board project approvals would highlight any concerns here. NPDO sites are less a concern in this item.
10	project	Higher than expected construction costs	2	3	6	Yellow	Property Manager	This project has already been tendered, so not deemed an issue.
11	project	Unforeseen Technical Difficulties	2	3	6	Yellow	Property Manager	The contractor has performance risk, so not deemed a major concern. The tender exercise had a significant quality element.
12	project	Poor contractor performance.	2	3	6	Yellow	Property Manager	The contractor has performance risk, so not deemed a major concern. The tender exercise had a significant quality element.
13	project	Poor consultant performance	2	3	6	Yellow	Property Manager	The contractor has performance risk, so not deemed a major concern.
14	project	Salient points missed in FBC development	2	3	6	Yellow	Property Manager	FBC scoring process may draw out issues. Early review of FBC by Project Team. Asset Management Board would be informed of significant concerns as the project develops.
15	strategic & financial	Internal Client concerns	1	4	4	Yellow	Property Manager	The project is fairly straightforward/uncomplicated in scope and is unlikely to meet with objection - so this is not a major concern. Appropriate staff resource to be afforded to support and supervise the project. Early consultation to take place.

Appendix 3 Business Case Appraisal Assessment and Weightings			
Assessment	Features of Strong Projects	Features of Weak Projects	Weight
Impact: The project will make explicit contributions to the Council's plans and strategies and will ensure compliance with external requirements			
Impact on Corporate Plan	Clear links to corporate plan that demonstrate how the project will contribute to strategic objectives.	Links are not clear and the relationship to strategic objectives is vague.	3.0
Impact on Service Plans	Clear links to service plans that demonstrate how the project will contribute to service priorities.	Links are not clear and the relationship to service priorities is vague.	0.4
Impact on Area Plans	Clear links to area plans that demonstrate how the project will contribute to area priorities.	Links are not clear and the relationship to area priorities is vague.	0.4
Impact on Corporate Strategies	Clear links to identified corporate strategies that demonstrate how the project contributes to these.	Links are not clear and the contribution of the project is vague.	0.4
Impact on Carbon Management Plan	Clear links identified to carbon management plan that demonstrate how the project contributes to the plan.	Links are not clear and the contribution of the project is vague.	0.4
Impact on Compliance with Legal and National Priorities.	Compliance and national priorities clearly identified and the relationship of the project clearly demonstrated.	Vague reference to compliance issues and national priorities without specific identification of relationships.	0.4
Affordability: The project is an acceptable and prudent financial investment for the Council and the Council can sustain the on-going running costs.			
Capital costs are affordable	Net capital costs are low.	Net capital costs are high.	1.0
On-going revenue costs are affordable	Net revenue costs are low	Net revenue costs are high.	1.0
External funding leveraged by the project	Significant external funding levered in	No external funding levered in.	0.5
Deliverability: The project can be delivered successfully.			
Timescales for delivery	The timescale for delivery is clearly stated and is acceptable.	The timescale for delivery is not clearly stated or is unacceptable.	0.42
Management arrangements to deliver project	The management arrangements for the project are clearly stated and are acceptable.	The management arrangements for the project are not clearly stated or are unacceptable.	0.42
Residual/knock on consequences	The residual or knock on consequences of the project are clearly stated and are acceptable.	The residual or knock on consequences of the project are not clearly stated or are unacceptable.	0.41
Risk: Progressing the project does not expose the Council to unacceptable risk.			
What are impact risks	The risks of not making the intended impact as outlined above have been identified and are assessed as limited.	The risks of not making the intended impact as outlined above have not been identified or are	0.25

		assessed as significant.	
What are delivery risks	The timescale, management arrangements and residual or knock on consequences have been robustly constructed and the related risks are clearly identified and are limited.	The timescale, management arrangements and residual or knock on consequences have only been compiled on a vague basis or not clearly identified or there are significant or unpredictable risks.	0.25
What are affordability risks	Robust estimates of capital and revenue cost have been made and external funding is secured. Risks have been clearly identified and assessed.	Only preliminary estimates of capital and revenue cost have been made and external funding is anticipated rather than secured. No clear assessment has been made of the financial impact of risks.	0.25
Risk Management arrangements	Robust strategies and arrangements to identify, manage and control risk developed.	No clear arrangements to manage risk	0.25
What are the risks of not proceeding with the project.	An assessment of these has been made and evidenced and there is significant risk of not proceeding with the project.	No assessment made or only vague references or limited risk of not proceeding with the project.	0.25