ARGYLL AND BUTE COUNCIL **POLICY & RESOURCES COMMITTEE**

Commercial Services **13th May 2021**

Non-Domestic Energy Efficiency Project (NDEEF) – 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 Argyll and Bute Council's intention to utilise the Scottish Government Non-Domestic Energy Efficiency Framework (NDEEF) to deliver a range of energy efficiency projects at 11no. Council properties. The delivery of these projects will not only reduce energy costs once installed but will also contribute to the Council meeting Climate Change targets. The overall Council Budget in both 2020 and 2021 included provisions for investment in energy efficiency and climate change of up to £1.1m and these projects will be the principal contributor to meeting that commitment. The properties which have been selected for inclusion in the NDEEF project, at this stage, are:

- Manse Brae Roads Office
- Lochgilphead Community Education Centre
- Kilmory Castle
- Riverside Leisure Centre
- Lochgilphead Learning Resource Centre
- Rothesay Leisure Pool
- The Moat Centre
- Kintyre House
- Graham Williamson IT Centre
- Arrochar Primary School
- Strachur Primary School

The Policy & Resources Committee is asked to:

i. Note that the Full Business Case has been approved by SMT and DMT which estimates that capital funding of circa £1,271,351 will be invested in 11no. sites to improve non-domestic energy efficiency performance across the Council's estate and have agreed to the signing of an Energy Performance Contract (EnPC);
ii. Note that the Full Business Case estimates revenue savings of £123,539 per annum with aggregated simple payback period of 10.29 years for the 11no. sites. Annual carbon savings of circa 463 Tonnes of carbon dioxide equivalent are also anticipated;
iii. Note that based on the impact, affordability (this project is funded using existing approved capital), deliverability and risk for the 11no. sites this project should progress to the signing of an Energy Performance Contract (EnPC) leading to the implementation/delivery stage financed by £1.1m from the Budget commitment and £171,351 of allocated capital works; and
iv. Agree revenue savings generated from delivery of this project will be recovered centrally and requests for further funding to support climate change measures, backed up by suitable business case, will be considered.

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Commercial Services **13th May 2021**

Non-Domestic Energy Efficiency Project (NDEEF) – Full Business Case

2.0 INTRODUCTION

2.1 This paper provides, for consideration, a Full Business Case to progress with Argyll and Bute Council's intention to utilise the Scottish Government Non-Domestic Energy Efficiency Framework (NDEEF) to deliver a range of energy efficiency projects at 11no. Council properties. The overall Council Budget in both 2020 and 2021 included provisions for investment in energy efficiency and climate change of up to £1.1m and these projects will be the principal contributor to meeting that commitment.

3.0 RECOMMENDATIONS

The Policy & Resources Committee is asked to:

3.1 Note that the Full Business Case has been approved by SMT and DMT which estimates that capital funding of circa £1,271,351 will be invested in 11no. sites to improve non-domestic energy efficiency performance across the Council's estate and have agreed to the signing of an Energy Performance Contract (EnPC);

3.2 Note that the Full Business Case estimates revenue savings of £123,539 per annum with aggregated simple payback period of 10.29 years for the 11no. sites. Annual carbon savings of circa 463 Tonnes of carbon dioxide equivalent are also anticipated;

3.3 Note that based on the impact, affordability (this project is funded using existing approved capital), deliverability and risk for the 11no. sites this project should progress to the signing of an Energy Performance Contract (EnPC) leading to the implementation/delivery stage financed by £1.1m from the Budget commitment and £171,351 of allocated capital works; and

3.4 Agree revenue savings generated from delivery of this project will be recovered centrally and requests for further funding to support climate change measures, backed up by suitable business case, will be considered.

4.0 DETAIL

4.1 **Background:** Scotland is transitioning to a net-zero emissions outcome for the benefit of our environment, our people, and our prosperity. Scotland's climate change legislation sets a target date for net-zero emissions of all greenhouse gases by 2045. The Scottish Government has updated its Climate Change Plan to reflect the increased ambition of the new targets set in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. The Council's Climate Change Board and Climate Change Environmental Action Group also seek to reduce greenhouse gas emissions by the Council both directly and indirectly.

4.2 Carbon emissions associated with the Council's estate and buildings accounts for over 20% of the Council's overall carbon footprint. These emissions arise from use of electricity, gas, heating oil and water in premises. Whilst a number of energy efficiency projects like insulation and switching to LED lighting or generating renewables have already been achieved more can be done. Switching to more efficient technologies will not only benefit both energy consumption and energy cost but will also improve 'green credentials'.

4.3 Approximately £1.2Million of viable project work was identified across 11no. assorted council premises and an invitation to tender was prepared to utilise the Scottish Government's 'Non-Domestic Energy Efficiency Framework (NDEEF)'. The NDEEF was developed by the Scottish Government to provide a route to market for the effective delivery of retrofit energy efficiency works to existing non-domestic public buildings. Framework providers are required to offer a level of energy performance guarantees through the singning of an Energy Performance Contract (EnPC). Works content included further introduction of energy efficient lighting, improved heating and ventilating controls, installation of air source heat pumps, solar PV, etc. The framework has been developed over the past six years by the Scottish Futures Trust (SFT), a public funded infrastructure delivery body, combined with assistance from the international engineering consultants Mott MacDonald who act as the Project Support Unit (PSU). The framework is managed by Scottish Procurement, who are part of the Scottish Government, and has been developed to help public sector bodies progress their energy efficiency projects within their estates in order to achieve the legislated 2045 emission targets. The framework provides a list of eleven pre−selected contractors that the public sector can call−off to retrofit energy efficiency works.

4.4 **Tendering Exercise:** To achieve the financial and carbon savings referred to in the Full Business Case in Appendix 2 and summarized in section 3.2, 11 no. sites were identified for inclusion in the NDEEF Invitation to Mini Competition (ITMC). The sites are as follows:

1. Manse Brae Roads Office
2. Lochgilphead Community Education Centre
3. Kilmory Castle
4. Riverside Leisure Centre
5. Lochgilphead Learning Resource Centre
6. Rothesay Leisure Pool
7. The Moat Centre
8. Kintyre House
9. Graham Williamson IT Centre
10. Arrochar Primary School
11. Strachur Primary School

The properties were selected on the basis of perceived opportunities for energy efficiency savings and because previously identified capital works to replace the oil fired heating systems are required to be delivered at some of these locations. These capital works were categorised within the tender documents as Mandated Works. The properties selected also present additional benefits:

- Fossil fuel costs are relatively low at present but that is not expected to be sustained over the lifetime of project and as fossil fuel prices increase the project payback reduces
- Fossil fuels are a diminishing resource and their ongoing use is not sustainable.

- There are economies of scale associated with awarding a contract that include a combination of larger and smaller projects

A Commodity Sourcing Strategy for Energy Efficient Solutions was conducted and approved and the use of the NDEEF was selected as the preferred delivery mechanism. Subsequently, Procurement and Energy and Building Services Team staff engaged with Mott MacDonald to prepare an ITMC for the delivery of various energy efficiency works at 11no. Council properties.

The ITMC has been conducted using the NDEEF framework and a preferred bidder has been identified.

The contractual arrangements of this project consist of 2 distinct elements –

1. The Development Agreement (DA)
2. The Energy Performance Contract (EnPC)

The DA is a contract between Argyll and Bute Council and the Shortlisted Bidder to produce the Investment Grade Proposal (IGP), comprising the Investment Grade Audit (IGA) accompanied by a Monitoring and Verification Plan (M+VP) and detailed commercial offer which equals or improves upon the position set out in the ITMC return.

The EnPC is the Call-Off Contract under the NDEEF between Argyll and Bute Council and the Shortlisted Bidder.

Having chosen the Contractor with the most economically advantageous tender in response to the ITMC, the Council would enter into an Energy Performance Contract (EnPC) under the Framework. The EnPC ensures the Contractor guarantees the level of energy consumption savings that the costed measures and any associated services will achieve. Any shortfall between the agreed level of energy consumption savings and those achieved as determined through an internationally agreed approach to Measurement and Verification (M&V), conducted by an independent M&V Specialist, is deducted from payment otherwise due to be made to the Contractor. The maximum that can be clawed back is 15% of capital investment.

4.5 **Current Position:** The timeline for the project is being driven by the need to transition to a net-zero emissions outcome for the benefit of our environment, our people, and our prosperity by 2045. A Contract Award Recommendation Report (CARR) was signed off in November 2020 to allow the preferred bidder to progress with the IGP. A fully costed ECM Matrix has been produced detailing every individual energy efficiency measure across all 11 sites with associated utility and carbon savings.

As all 11 sites are subject to statutory consents (planning permission, building warrant), there remains a risk that some of the individual Energy Conservation Measures (ECMs) might not be capable of being delivered. Should this circumstance arise, then ECMs will be prioritised to maximise the financial/carbon savings to the Council through continual monitoring during the acceptance/implementation stage.

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

Criteria	NDEEF Project	
FBC Impact Score	**50/50**	100%
FBC Affordability Score	**20/25**	80%
FBC Deliverability Score	**11.67/12.5**	93%
FBC Risk Score	**11.25/12.5**	90%
FBC Overall Score	**92.92/100**	92.9%
FBC Overall Rating	4	
Funding Required	£1,271,351	
Net Annual Saving	£123,539	
Payback period	10.29 years	
Working life of major plant	20+ years	
Annual Carbon Reduction	463 Tonnes	

The payback period is calculated utilising a simple analysis based on the ratio of capital investment to net annual revenue savings (gas/elec/oil utility cost savings).

4.7 The Provisional Full Business Case is 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.

4.8 The £1,271,351 to deliver the project will be made up entirely of approved capital funding. The following table details the breakdown of funding sources –

Funding Source	Capital Allocation 20/21 (£)	Capital Allocation 21/22- 22/23 (£)	
Climate Change	500,000		
Climate Change		600,000	
Arrochar Primary School Heating Upgrade	30,000		
Lochgilphead Community Education Centre Heating Upgrade	50,000		
Moat Centre Rewire		10,000	
Kilmory Rewire		81,351	
Totals	**580,000**	**691,351**	**1,271,351**

5.0 CONCLUSION

5.1 The Full Business Case for the 11no. sites achieves the highest possible rating of 4 in accordance with the Councils Capital Programme Planning and Management Guide.

5.2 The project offers: a significant reduction in the Council's carbon footprint (463Tonnes); integrates robust monitoring and verification procedures into the delivery program to validate savings achieved; reduced reliance on fossil fuels.

5.3 The project has a solid collective simple payback of 10.29 years and it is anticipated the majority of works, on the 11 projects, will commence this year (2021) with spend fully committed by March 2022. The first projects are likely to commence on site in early summer 2021. A detailed programme is currently being developed.

5.4 The NDEEF project delivery model maximizes best use of Council resources whilst ensuring best-in-class energy efficiency solutions are deployed resulting in value for money low carbon technologies across our built estate.

5.5 This project is regarded as an example of contributing to the 'green recovery' in the wake of the COVID pandemic.

6.0 IMPLICATIONS

6.1 Policy - This proposal is entirely consistent with climate change policy and action at local, national and international level. Failure to deliver the project would impact on the Councils support of the transition to a low carbon economy, as set out in the Scottish Government's Economic Strategy, and to contribute to Climate Change targets.

6.2 Financial – This project is funded using existing approved capital. Based on the 10.29 year payback, the project will realise estimated minimum annual savings in utility consumption of £123,539 per annum, assuming the consumption at the time of the contract remains consistent.

6.3 Legal - None

6.4 HR - None

6.5 Fairer Scotland Duty – N/A

6.6 Equalities – protected characteristics – None

6.7 Socio-economic Duty – N/A

6.8 Islands – N/A

6.6 Risk - As indicated within the risk section of the FBC in Appendix 2

6.7 Customer Service - Further consequential improvements in addition to the financial savings will be realised in the form of improved control and building environmental conditions.

Douglas Hendry
Executive Director with responsibility for Commercial Services

24 March 2021

Councillor Robin Currie
Council Leader

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APPENDICES

Appendix 1: Non-Domestic Energy Efficiency Project (NDEEF) – Proposed Site/ECM List
Appendix 2: Full Business Case
Appendix 3: Business Case Appraisal Assessment and Weightings

Appendix 1 Non-Domestic Energy Efficiency Project (NDEEF) – Proposed Site/ECM List

Argyll & Bute Council

Non-Domestic Energy Efficiency Project (NDEEF) – Proposed Site/ECM List

Site	Energy Conservation Measure (ECM)	Tendered Project Capital Cost (includes Provisional Sums)	Planning Fee	Building Warrant Fee	Savings (kWh/annum)	Payback Savings (£/annum)	Simple Payback (Years)	CO2 Savings (Tonnes/annum)	ECM Lifetime (Based on Salix Persistance Factors)	Lifetime CO_2 Savings (Tonnes)
Manse Brae Roads Office	LED Lighting Upgrade	£19,322	Included	Included	37,311	£3,283	5.9	10.35	25.00	259
Kilmory Castle & Estate	LED Lighting Upgrade	£81,351	Included	Included	85,942	£11,172	7.3	23.83	25.00	596
Lochgilphead CEC	LED Lighting Upgrade	£10,276	Included	Included	12,707	£1,118	9.2	3.52	25.00	88
Riverside Leisure Centre	LED Lighting Upgrade	£8,824	Included	Included	7,994	£1,039	8.5	2.22	25.00	55
Rothesay Leisure Pool	LED Lighting Upgrade	£6,799	Included	Included	8,502	£1,105	6.2	2.36	25.00	59
Graham Williamson IT Centre	LED Lighting Upgrade	£9,161	Included	Included	10,956	£964	9.5	3.04	25.00	76
Lochgilphead Resource Centre	LED Lighting Upgrade	£10,284	Included	Included	10,170	£895	11.5	2.82	25.00	71
Arrochar Primary School	LED Lighting Upgrade	£17,648	Included	Included	21,080	£1,855	9.5	5.85	25.00	146
Kintyre House	LED Lighting Upgrade	£29,676	Included	Included	31,033	£4,034	7.4	8.61	25.00	215
Manse Brae Roads Office	Solar PV	£38,267	Included	Included	21,070	£1,854	20.6	5.84	22.50	131
Kilmory Castle & Estate	Solar PV	£27,731	Included	Included	18,042	£2,345	11.8	5.00	22.50	113
Lochgilphead CEC	Solar PV	£21,685	Included	Included	9,173	£807	26.9	2.54	22.50	57
Riverside Leisure Centre	Solar PV	£70,157	Included	Included	59,168	£7,692	9.1	16.41	22.50	369
Rothesay Leisure Pool	Solar PV	£51,023	Included	Included	35,250	£4,583	11.1	9.77	22.50	220
Graham Williamson IT Centre	Solar PV	£51,023	Included	Included	42,140	£3,708	13.8	11.69	22.50	263
The Moat Centre	Solar PV	£21,685	Included	Included	10,114	£890	24.4	2.80	22.50	63
Lochgilphead Resource Centre	Solar PV	£21,685	Included	Included	9,173	£807	26.9	2.54	22.50	57
Kintyre House	Solar PV	£31,889	Included	Included	23,275	£3,026	10.5	6.45	22.50	145
Riverside Leisure Centre	High Efficiency Pool AHU	£95,668	Included	Included	226,000	£4,475	21.4	41.55	30.00	1,247
Manse Brae Roads Office	BMS Optimisation	£1,870	Included	Included	18,706	£1,033	1.8	4.82	9.00	43
Kilmory Castle & Estate	BMS Optimisation	£12,710	Included	Included	104,029	£6,749	1.9	26.24	9.00	236
Lochgilphead CEC	BMS Optimisation	£1,870	Included	Included	12,843	£721	2.6	3.31	9.00	30
Rothesay Leisure Pool	BMS Optimisation	£5,618	Included	Included	66,663	£645	8.7	17.22	9.00	155
Strachur Primary School	BMS Optimisation	£2,125	Included	Included	6,863	£380	5.6	1.77	9.00	16
The Moat Centre	BMS Optimisation	£1,870	Included	Included	18,479	£374	5.0	3.41	9.00	31
Lochgilphead Resource Centre	BMS Optimisation	£1,870	Included	Included	17,368	£941	2.0	4.46	9.00	40
Kintyre House	BMS Optimisation	£6,821	Included	Included	28,393	£3,691	1.8	7.87	9.00	71
Manse Brae Roads Office	Covert Oil Boiler to ASHP	£70,145	Included	Included	107,559	£4,565	15.4	26.87	10.83	291
Lochgilphead CEC	Covert Oil Boiler to ASHP	£67,928	Included	Included	100,500	£4,266	15.9	25.10	10.83	272
Strachur Primary School	Covert Oil Boiler to ASHP	£48,523	Included	Included	65,453	£2,778	17.5	16.35	10.83	177
Lochgilphead Resource Centre	Covert Oil Boiler to ASHP	£51,023	Included	Included	81,877	£3,317	15.4	20.36	10.83	220
Arrochar Primary School	Covert Oil Boiler to ASHP	£73,785	Included	Included	65,453	£2,778	26.6	16.35	10.83	177
Rothesay Leisure Pool	Boiler Optimiser	£3,189	Included	Included	68,677	£1,360	2.3	12.63	6.84	86
Riverside Leisure Centre	Boiler Optimiser	£4,146	Included	Included	140,741	£2,787	1.5	25.88	6.84	177

The Moat Centre	Boiler Optimiser	£3,189	Included	Included	24,170	£479	6.7	4.44	6.84	30
Kilmory Castle & Estate	Fridge Optimiser	£1,818	Included	Included	3,805	£495	3.7	1.06	11.40	12
Strachur Primary School	Fridge Optimiser	£620	Included	Included	1,183	£104	6.0	0.33	11.40	4
Lochgilphead Resource Centre	Fridge Optimiser	£950	Included	Included	1,809	£159	6.0	0.50	11.40	6
Arrochar Primary School	Fridge Optimiser	£621	Included	Included	1,183	£104	6.0	0.33	11.40	4
Kilmory Castle & Estate	Server Room Cooling Upgrade	£92,959	Included	Included	91,665	£11,916	7.8	25.42	10.83	275
Graham Williamson IT Centre	Server Room Cooling Upgrade	£7,564	Included	Included	20,148	£1,773	4.3	5.59	10.83	61
Riverside Leisure Centre	Pool Pump Control	£9,567	Included	Included	41,800	£5,434	1.8	11.59	10.26	119
Rothesay Leisure Pool	Pool Pump Control	£9,567	Included	Included	28,500	£3,705	2.6	7.90	10.26	81
Rothesay Leisure Pool	HWS Recirc Pump Control	£3,954	Included	Included	20,603	£408	9.7	3.79	6.84	26
Riverside Leisure Centre	HWS Recirc Pump Control	£3,954	Included	Included	20,603	£408	9.7	3.79	6.84	26
The Moat Centre	HWS Recirc Pump Control	£0	Included	Included	19,336	£383	0.0	3.55	6.84	24
Manse Brae Roads Office	Self-learning eTRV	£1,276	Included	Included	9,481	£512	2.5	2.43	6.84	17
Kilmory Castle & Estate	Valve Wrap	£6,378	Included	Included	23,292	£1,187	5.4	1.69	29.25	50
Lochgilphead CEC	Valve Wrap	£638	Included	Included	3,544	£191	3.3	0.91	29.25	27
Strachur Primary School	Valve Wrap	£638	Included	Included	2,308	£125	5.1	0.59	29.25	17
Lochgilphead Resource Centre	Valve Wrap	£638	Included	Included	4,834	£261	2.4	1.24	29.25	36
Kilmory Castle & Estate	Coolnomix	£5,687	Included	Included	16,650	£2,165	2.6	4.62	6.84	32
Riverside Leisure Centre	Coolnomix	£2,843	Included	Included	3,303	£429	6.6	0.92	6.84	6
Rothesay Leisure Pool	Coolnomix	£2,843	Included	Included	3,303	£429	6.6	0.92	6.84	6
Kintyre House	Coolnomix	£11,480	Included	Included	6,419	£834	13.8	1.78	6.84	12
IGP Fee		£20,555								
M&V Fee		£41,704								
Internal Fees		£54,259								
Contingency		£10,000								
TOTALS:-	**TOTALS:-**	**£1,271,351**			**1,930,640**	**£123,539**	**10.29**	**463**		**7,123**

Appendix 2 Full Business Case Non-Domestic Energy Efficiency Project (NDEEF)

ARGYLL & BUTE COUNCIL

FULL BUSINESS CASE FOR CAPITAL PROJECTS

DEPARTMENT Customer Services **SERVICE Facility Services**

Asset Type Varies **Asset Group Varies**

Project Name: Non-Domestic Energy Efficiency Project (NDEEF) - Carbon Management Projects – Strategic Change

1. Executive Summary

Brief statement of what is proposed.

Carbon emissions associated with the Council's estate and buildings accounts for over 20% of the Council's overall carbon footprint. These emissions arise from use of electricity, gas, heating oil and water in premises. Whilst a number of energy efficiency projects like insulation and switching to LED lighting or generating renewables have already been achieved more can be done. Switching to more efficient technologies will not only benefit both energy consumption and energy cost but will also improve 'green credentials'.

This proposal supports a multi-site energy efficiency '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 mix of energy efficiency technologies.

A desk-top review of the council estate was carried out and a shortlist of 11no. properties were selected where perceived opportunities for energy efficiency savings existed. Site audit visits were then undertaken and approximately £1.2Million of viable project work was identified across the 11no. assorted premises. An invitation to tender was prepared to utilise the Scottish Government's 'Non-Domestic Energy Efficiency Framework (NDEEF)

This proposal is therefore based on actual tender returns, eliminating a significant amount of financial uncertainty/risk. Tenders were invited using the NDEEF framework utilising a contractor design/build solution which will ultimately result in the signing of an Energy Performance Contract – thereby passing off performance risk to the contractor and ensuring that design solutions will be robust/reliable. An international engineering consultant, who fulfil a Project Support Unit (PSU) role under the NDEEF framework has supported, advised and contributed to the tender process, including evaluation. The PSU will continue to support and advise throughout the project implementation/delivery phase.

This FBC is submitted on the basis that the project concerned demonstrates excellent carbon reduction, reduced reliance on fossil fuels, integrates robust monitoring and verification procedures into the capital delivery program and offers a solid payback opportunity.

The do minimum option would be to ignore the energy efficiency measures and continue with the existing 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 energy efficiency solutions to existing sites. Retrofitting energy efficiency solutions, especially on 'tight' sites, are not without risk and the choice of technology (e.g. solar PV, air source heat pump, etc.), structural

considerations, planning constraints, location of plant etc. all need careful consideration. In this instance, the preferred bidder has proposed extensive use of established technologies with proven track records of operational efficiency which largely sit within the existing building envelopes – a key consideration when they have performance risk.

Oil, and particularly electric, have high carbon emissions factors. Energy Conservation Measures (ECMs) have been selected which maximize savings in these areas. Displacement of oil fired heating with high efficiency air source heat pump solutions has been a key consideration when determining the full suite of ECMs to be deployed as part of this project.

The particular sites that most benefit from displacement of oil heating have a combination of the following:

- No gas grid connection available
- Significant oil user
- Significant operational property

Argyll and Bute Council identified a priority list of 11no sites to consider for ECMs. All 11no sites are proposed to be taken forward as part of this FBC:

- Manse Brae Roads Office
- Lochgilphead Community Education Centre
- Kilmory Castle
- Riverside Leisure Centre
- Lochgilphead Learning Resource Centre
- Rothesay Leisure Pool
- The Moat Centre
- Kintyre House
- Graham Williamson IT Centre
- Arrochar Primary School
- Strachur Primary School

Note: these eleven sites were considered after a review of future sales/transfers/closures etc of any building at the time. 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.
- Utility cost savings.
- Carbon emissions reduction - contribution of circa 463 tonnes CO_2 reduction
- Project payback and a return on investment.
- Less dependance on diminishing fossil fuels (e.g. heating oil)
- Reputational benefits.
- Learning opportunities.

The project summary is as follows:

- **11no. properties**
- **463 tonnes CO2 savings per annum**
- **£123,539 savings per annum**
- **Simple Payback of 10.29 years against a £1,271,351 capital investment (includes tender package, contingencies, fees)**

Supporting information is as follows:
Specific Site Audit Analysis Report

Notes:

(1) The Council has set a target to reduce reliance on fossil fuels and this project would contribute.

2. Impact on Council Plans

The project links directly to the Councils Corporate Plan 2018-2022 with vision 'Argyll and Bute is an area of Scotland with outstanding places, people and potential for a prosperous future for everyone. Our Council, along with our Community Planning Partners, is committed to ensuring that *Argyll and Bute's Economic Success is built on a Growing Population'.*

Accordingly, Argyll and Bute Council's Mission involves the delivery of 6 corporate outcomes and make Argyll and Bute a place people choose to Live, Learn, Work and Do Business:

- Our Economy is diverse and thriving (A place people choose to Work and Do Business)
- We have an infrastructure that supports sustainable growth (A place people choose to Work and Do Business)
- Education skills and training maximise opportunities for all (A Place people choose to Learn)
- Children and young people have the best possible start (A Place people chose to Live)
- People live active, healthier and independent lives (A Place people chose to Live)
- People will live in safer and stronger communities (A Place people chose to Live)

There are 3 Business Outcomes associated with the Corporate Outcomes that are particularly relevant to the NDEEF project:

- People will live in safer and stronger communities (A Place people chose to Live)
    - BO105 – Our Natural And Built Environment is Protected and Respected

- We have an infrastructure that supports sustainable growth (A place people choose to Work and Do Business)
    - BO113 – Our Infrastructure is safe And Fit For the Future
    - BO114 – Our Communities are Cleaner And Greener

Scotland is transitioning to a net-zero emissions outcome for the benefit of our environment, our people, and our prosperity. Scotland's climate change legislation sets a target date for net-zero emissions of all greenhouse gases by 2045. The Scottish Government has updated its Climate Change Plan to reflect the increased ambition of the new targets set in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. The Council's Climate Change Board and Climate Change Environmental Action Group also seek to reduce greenhouse gas emissions by the Council both directly and indirectly.

Carbon emissions associated with the Council's estate and buildings accounts for over 20% of the Council's overall carbon footprint. These emissions arise from use of electricity, gas, heating oil and water in premises. Whilst a number of energy efficiency projects like insulation and switching to LED lighting or generating renewables have already been achieved more can be done. Switching to more efficient technologies will not only benefit both energy consumption and energy cost but will also improve 'green credentials'.

Through the NDEEF project, Argyll and Bute Council would be specifically introducing a wide range of 'best in class' energy efficiency measures and renewable energy assets onto 11no Council premises. These projects are directly compatible with Argyll and Bute Council's De-Carbonisation Plan which in turn contributes to both national and international climate change mitigation.

Argyll and Bute Council's Corporate Plan also makes a 'Getting it Right' commitment. Business

Outcome BO115 'We are Efficient And Cost Effective'. The NDEEF project is effectively a spend to save project (with simple payback on investment of circa 10 years). For a capital investment of £1,271,351, the NDEEF project will deliver £123,539/annum revenue savings and deliver a carbon saving of circa 463 tonnesCO2e/annum, thereby contributing to climate change carbon emissions reduction targets.

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 multiple energy conservation measures including the conversion of oil heating to a less expensive, more carbon friendly option. It is the year on year reduction in fuel revenue costs, that make this project affordable.

The installation of multiple energy conservation measures 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, pricing conditions e.g. fuel price volatility.

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. The air source heat pump technology included within this project not only offers a more efficient conversion of energy and therefore cheaper fuel costs, but presents the added benefit of a stable supply source (grid electricity) and the displacement of fuel delivery tankers with the resultant positive impact on the roads infrastructure.

The capital cost of the work is at circa £1,271,351 (including contingincies, fees etc) and would be recovered by a reduced revenue charge for gas/electric/oil costs (at circa £123,539 per annum). The project offers:

A simple project payback of circa 10.29 (project cost of £1,271,351 divided by annual utility cost saving of £123,539).

A carbon saving of 463 tonnes per annum would be delivered for a total investment of £1,271,351. This equates to a cost of £2,745 per tonne CO_2 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 its lifetime.

4. Deliverability

Refer also to Risk section.

This is an ambitious project – particularly in terms of the number of different energy conservation technologies proposed.

In this instance, a contractor design and build solution is proposed which will ultimately result in the signing of an Energy Performance Contract. As the contractor takes performance risk, the design is expected to be robust/reliable. An international engineering consultant, who fulfil a Project Support Unit (PSU) role under the NDEEF framework has supported, advised and contributed to the tender process, including evaluation. The PSU will continue to provide support through the implementation/delivery phase of the project.

Feedback from other UK local authorities is that the preferred bidder is highly capable with many similar projects delivered successfully.

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.
- Maximise the opportunity to undertake installation works during School Summer holidays and whilst buildings remain at low occupancy levels due to Covid homeworking arrangements.

5. Risk

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

- Failure to approve funding
- Internal Client Concerns
- Plant/Equipment premature expiry
- Revenue Savings not realised
- Power/Grid connection issues
- Property Closure/Transfer
- Scheduling issues
- Retrofit headaches
- Higher than anticipated capital costs
- Unforeseen technical difficulties (including retrofit headaches)
- Poor Contractor Performance
- Poor Consultant performance
- FBC misses salient points
- Covid Impact
- Planning/Building Control/Consent Issues

Risk of not proceeding with the project:

- Council remains reliant on the volatile and generally rising price of oil/electric.
- 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 463 tonnes CO_2 per annum).

Argyll & Bute Council – Non-Domestic Energy Efficiency Project (NDEEF)		RISK ASSESSMENT/RISK LOG WORKSHEET						
Ref	**Category**	**Risk Description**	**Chance**	**Impact**	**Score**	**Risk Level**	**Risk Lead**	**Mitigating Action**
1	strategic & financial	Capital funding for programme is not approved	1	5	5	Yellow	HOS, Property Services Manager	Programme is in support of Corporate Plan (including carbon management programme delivery), Improvement Plan etc. Spend to Save project so savings generated.
2	strategic & financial	Internal Client concerns	1	4	4	Yellow	Property Services 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.
3	strategic & financial	Plant/equipment expires prematurely (within expected life cycle)	2	4	8	Amber	Property Services Manager	Suitable quality of plant/equipment needs to be procured - with a strong emphasis on warranties (unlikely to be valid for the project whole life).
4	strategic & financial	Predicted revenue savings not realised	2	3	6	Yellow	Property Services 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 the energy conservation measures proposed. The project is subject to an Energy Performance Contract which builds in contractor performance risk through the Monitoring & Verification Plan which is managed by an independent specialist.
5	strategic & financial	Power/Grid Connection Issues	2	5	10	Amber	Property Services Manager	Early analysis of onsite electrical load availability and local grid connection constraints to form part of detailed design considerations. The suite of energy conservation measures proposed for each site is anticipated to result in a net reduction of electrical load, therefore this is not deemed to be an issue.

6	strategic & financial	Property Closure/Transfer etc	2	3	6	Yellow	Property Services Manager	Asset Management Board project approvals would highlight any concerns here. Relatively modest values per building with good paybacks involved.
7	operational	Scheduling Issues	2	3	6	Yellow	Property Services 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.
8	project	Retrofit headaches	3	3	9	Amber	Property Services Manager	The project is fairly straightforward/uncomplicated in scope - Energy Conservation Measures selected are established technologies already in place within the ABC estate. Interconnection with existing heating systems presents the risk of some heating related problems - to be considered fully prior to project delivery. Maximise use of holiday periods and limited building occupancy levels due to Covid homeworking to keep scheduling impacts as low as possible. Appropriate staff resource to be afforded to support and supervise the project. Asbestos surveys to be undertaken, but only limited areas affected. Ecological surveys to be undertaken on a limited number of sites.
9	project	Higher than expected construction costs	2	3	6	Yellow	Property Services Manager	This project has already been tendered and is subject to an Energy Performance Contract which defines the Capital cost and the Guaranteed Energy Cost Performance (Savings), so not deemed an issue.
10	project	Unforeseen Technical Difficulties	2	3	6	Yellow	Property Services Manager	The project is subject to an Energy Performance Contract which builds in contractor performance risk through the Monitoring & Verification Plan which is managed by an independent specialist, so not deemed a major concern. The tender exercise also had a significant quality element. The NDEEF is a UK Government Framework which has vetted all contractors prior to their inclusion on the framework. Overarching project support is provided via the NDEEF Project Support Unit. The consultant which holds the PSU position has been in place since the inception of the NDEEF framework and has overseen dozens of NDEEF projects.

11	project	Poor contractor performance	2	3	6	Yellow	Property Services Manager	The project is subject to an Energy Performance Contract which builds in contractor performance risk through the Monitoring & Verification Plan which is managed by an independent specialist, so not deemed a major concern. The tender exercise also had a significant quality element. The NDEEF is a UK Government Framework which has vetted all contractors prior to their inclusion on the framework. Overarching project support is provided via the NDEEF Project Support Unit. The consultant which holds the PSU position has been in place since the inception of the NDEEF framework and has overseen dozens of NDEEF projects.
12	project	Poor consultant performance	2	3	6	Yellow	Property Services Manager	The project is subject to an Energy Performance Contract which builds in contractor performance risk through the Monitoring & Verification Plan which is managed by an independent specialist, so not deemed a major concern. The tender exercise also had a significant quality element. The NDEEF is a UK Government Framework which has vetted all contractors prior to their inclusion on the framework. Overarching project support is provided via the NDEEF Project Support Unit. The consultant which holds the PSU position has been in place since the inception of the NDEEF framework and has overseen dozens of NDEEF projects.
13	project	Salient points missed in FBC development	2	3	6	Yellow	Property Services 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.
14	political / community	Covid Impact	3	4	12	Amber	Property Services Manager	The evolving position with Coronavirus (COVID-19) will continue to be monitored and guidance followed. The UK vaccination program and continued Covid mitigation protocols are anticipated to allow the project to proceed.
15	statutory	Planning/Building control issues	2	3	6	Yellow	Property Services Manager	Early consultation shall take place with the statutory authorities. Planning permission likely to be required only for Solar PV element of the works. Planning/Building control issues would be tackled as part of project design and responsibility sits with the Main Contractor as defined within the Energy Performance Contract.

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