

Item: 24

Policy and Resources Committee: 25 September 2018.

Stromness Multi Modal Low Carbon Transport and Active Travel Hub.

Report by Executive Director of Development and Infrastructure.

1. Purpose of Report

To consider a Stage 2 Capital Project Appraisal in respect of the Stromness Multi Modal Low Carbon Transport and Active Travel Hub.

2. Recommendations

The Committee is invited to note:

2.1.

That, on 13 March 2018, the Harbour Authority Sub-committee recommended that, as an exception to the Capital Project Appraisal process, in order to take advantage of potential external grant funding, the Executive Director of Development and Infrastructure should submit, to the Policy and Resources Committee, a Stage 2 Capital Project Appraisal in respect of a Multi Modal Low Carbon and Active Travel Hub at Stromness ferry terminal.

2.2.

That the following funding package was proposed in respect of a Multi Modal Low Carbon and Active Travel Hub at Stromness ferry terminal:

- Low Carbon Travel and Transport Challenge Fund – grant of 80% amounting to £671,600.
- HITRANS – £30,000 (3.6%).
- Miscellaneous Piers and Harbours Account – £138,000 (16.4%).

2.3.

That grant awards from the Low Carbon Transport Challenge Fund and HITRANS, amounting to £671,600 and £30,000 respectively, have subsequently been confirmed.

It is recommended:

2.4.

That the Stage 2 Capital Project Appraisal in respect of a Multi Modal Low Carbon Transport and Active Travel Hub, attached as Appendix 1 to this report, be approved.

2.5.

That the Multi Modal Low Carbon Transport and Active Travel Hub be added to the Miscellaneous Piers and Harbours capital programme over the period 2018 to 2020, at an overall gross project cost of £839,600.

2.6.

That the Council's contribution to the project, amounting to £138,000, be sourced from Miscellaneous Piers and Harbours funds, to be recovered through electricity charges to ferries using the Multi Modal Low Carbon Transport and Active Travel Hub over a 10-year period.

3. Introduction

3.1.

At its meeting held on 13 March 2018, the Harbour Authority Sub-committee noted:

3.1.1.

That the Council had submitted a grant funding application to the European Regional Development Fund Low Carbon Travel and Transport Challenge Fund towards development of a Multi Modal Low Carbon and Active Travel Hub at Stromness ferry terminal, at a total estimated project cost of £839,600.

3.1.2.

That the project, to be delivered over the period 2018 to 2020, incorporated installation of equipment to enable the provision of electrical power to electric car, bus and bicycle charging facilities and for shore supplied electrical power to the MV Hamnavoe.

3.1.3.

That, should the funding application be successful, the following funding package was proposed:

- Low Carbon Travel and Transport Challenge Fund – grant of 80% amounting to £671,600.
- HITRANS – £30,000 (3.6%).
- Miscellaneous Piers and Harbours Account – £138,000 (16.4%).

3.1.4.

That revenue costs associated with the vessel power supply elements of the project would be recovered through Harbour Charges, with costs associated with the electric vehicle facilities being treated in accordance with all other Council provided charging points.

3.1.5.

The Stage 1 Capital Project Appraisal in respect of the proposed Multi Modal Low Carbon and Active Travel Hub at Stromness ferry terminal, attached as Appendix 1 to the report by the Executive Director of Development and Infrastructure.

3.2.

The Sub-committee recommended that, as an exception to the Capital Project Appraisal process, in order to take advantage of potential external grant funding, the Executive Director of Development and Infrastructure should submit, to the Policy and Resources Committee, a Stage 2 Capital Project Appraisal in respect of a Multi Modal Low Carbon and Active Travel Hub at Stromness ferry terminal.

4. Background

4.1.

The background to the project is detailed in the Stage 2 Capital Project Appraisal, attached as Appendix 1 to this report. In summary, the project is aligned to the conditions of the Scottish Government administered European Regional Development Fund backed Low Carbon Travel and Transport Challenge (LCTT) Fund. This fund is for projects of scale, which are hub in nature, to lower carbon footprints and to enable active travel. Having failed to secure funding in a previous application, a fresh application which was more innovative, higher value and multi modal was encouraged by the LCTT team. In anticipation of success, Transport Scotland and Serco Northlink have funded and pre-fitted elements of the ship side equipment.

4.2.

The project has four elements all of which are set out in the Stage 2 Capital Project Appraisal and were considered in greater detail by the Harbour Authority Sub-committee at Stage 1. Those elements are:

4.2.1.

Element 1: Shore Power Cold Ironing. This will entail installation of an electric cable connection system to the ship to provide overnight shore power, pier cabling and a transformer upgrade.

4.2.2.

Element 2: Bicycle Storage and recharging facility. This will entail construction of a weather proof bicycle building to the south of the ferry building to protect/charge up to 10 bicycles. It will also entail the purchase of two electric bicycles.

4.2.3.

Element 3: Electric Vehicle charging points. This will be for three additional charging points.

4.2.4.

Element 4: Electric Bus charging facility. This will be a bus charging point in one of the bus bays at the ferry terminal car park.

4.3.

Elements 2, 3 and 4 all involve mature technology and are equivalent to projects already delivered in Orkney. These are considered very low risk; power supplies are adjacent in each case and a Council engineer has already been allocated to the work. The project will be delivered in parallel with other Electric Vehicle installations which are being separately grant funded, but cost efficiencies may be achieved through purchasing equipment for both as a batch. The project will be delivered between now and late summer 2019.

4.4.

Element 1 carries some technical and innovation risk. The equipment itself is mature but its use for ship shore power is relatively new for Scotland and hence there will be a learning curve during the project. However, prior work has been underway between the Council, Serco Northlink, Transport Scotland and the equipment suppliers for some time and it assessed that this risk is well understood and manageable. This project will also be delivered in the timescale from now until summer 2019. The power supplies at the pier have been assessed by SSE as suitable.

5. Options

There are only two options namely to proceed with the project or to halt the project should the financial risks be too high. These are analysed briefly in the Stage 2 Capital Project Appraisal and on the basis that the risks are assessed as low, the recommendation is to proceed with the project.

6. Links to Council Plan

The proposals in this report support and contribute to improved outcomes for communities as outlined in the Council Plan strategic priority theme of Enterprising Communities.

7. Links to the Local Outcomes Improvement Plan

The proposals in this report support and contribute to improved outcomes for communities as outlined in the Local Outcomes Improvement Plan priority of A Vibrant Economy.

8. Financial Implications

8.1.

The Stage 2 Capital Project Appraisal, attached to this report and which is aligned to the grant application, shows an overall project cost of £839,600 for the installation and commissioning of all equipment. 84% of this will be grant supported from the Scottish Government administered European Regional Development Fund Low Carbon Transport Challenge Fund (£671,600) and by HITRANS (£30,000) with the remaining 16% (£138,000) to be funded from the Miscellaneous Piers and Harbours budget.

8.2.

It is anticipated that the Council contribution of £138,000 will be recovered over a 10-year period from the sale of electricity to the ferry, noting that this will still produce a cost reduction for the ferry when compared to the cost of diesel. Beyond 10 years, the sale of electricity will be adjusted to better reflect a balanced position albeit with the aim of producing a small surplus. The net implication on the Miscellaneous Piers and Harbours budget, over 10 years, is therefore nil.

8.3.

The Miscellaneous Piers and Harbours budget currently has a ring-fenced fund of £5.9 million and hence, this project is affordable and there is no impediment to it being added to it the capital programme.

9. Legal Aspects

9.1.

The project is largely grant funded and hence the project will be required to adhere to all conditions set by the ERDF/Transport Scotland Low Carbon Transport Challenged Fund conditions associated with the acceptance of this grant.

9.2.

Procurement of electric vehicle equipment will follow the standard procurement procedures for EV charging points. The shore power equipment may require non-competitive action if it becomes clear that for the shore equipment to be compatible with the ship equipment already fitted, only one equipment type will be suitable. This will be established over the course of the next two to three months.

10. Contact Officers

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11. Appendix

Appendix 1: Stage 2 Capital Project Appraisal – Stromness Multi Modal Low Carbon Transport and Active Travel Hub.

APPENDIX 1

Capital Project Appraisal (CPA) – Stage 2

Committee: Harbour Authority Sub-committee

Project Name: Stromness Multi Modal Low Carbon Transport and Active Travel Hub

1. Background

At its meeting held on 13 March 2018, the Harbour Authority Sub-committee considered a CPA1 Stage 1 in respect of a Multi Modal Low Carbon and Active Travel Hub at the Stromness travel centre. The CPA1 was presented within the context of an application which had been made to the Scottish Government administered Low Carbon Travel and Transport Challenge Fund for 80% of the total project cost of £839,600 and for which a decision was expected at some stage over the Summer.

The recommendation was that a CPA2 be presented to the Policy and Resources Committee when/if the grant application was successful. This CPA2 therefore reflects the fact that the grant application was successful, the grant award has been accepted and the project is therefore at its initial phase. As such, this CPA2 is required for the purposes of project governance and to provide an opportunity for the project to be halted before capital expenditure should it be considered that the financial risks are unacceptable. The operational and policy aspects were addressed at the CPA1 stage.

This project under consideration will deliver the following elements:

- A cold ironing electrical power supply for the MV Hamnavoe whilst lying alongside Stromness overnight in order to remove its current carbon and noise footprint from its diesel engines. Serco Northlink and Transport Scotland are responsible for the ship elements some of which have already been fitted.
- An electric bus charging point to enable/encourage additional low carbon electric buses, potentially also on the busy X1 Stromness/St Margaret's Hope route.
- Additional electric vehicle (EV) charging points in the vicinity of the Travel Centre/Ferry Terminal for ferry users but also to be available for all EV users.
- An electric bike facility for the shelter and charging of electric bikes, again, at the ferry terminal, in order to encourage active travel for tourists and for residents.

The grant award is for £671,600 which represents 80% of the overall cost with match funding from HITRANS (£30,000 – 3.6%) and Orkney Marine Services (£138,000 – 16.4%). The Marine Services match will be recovered over a 10-year period through its charges for electricity for the Hamnavoe and hence the project is at no net cost to the Council over that time frame and could, beyond five years, produce a modest income.

As stated, the project is now underway through the following project elements:

- Element 1: Shore Power Cold Ironing. This will entail the installation of an electric cable connection system to the ship, pier cabling and a transformer upgrade. High Voltage is already available on the pier and costings have already been developed with SSE and the equipment supplier.
- Element 2: Bicycle Storage and recharging facility. This will entail the construction of a weather proof bicycle building to the south of the ferry building to protect/charge up to 10 bicycles. An off the shelf building will be procured and, as the power supply requirements are modest, there will be no significant 'services' costs. A further 2 bicycles will also be purchased.
- Element 3: Electric Vehicle charging points. This will be for an additional 3 charging points. The location has yet to be finalised, but they will be within the vicinity of the ferry terminal in order to make them readily available for ferry users but also available for all other users. One option is to create a larger EV hub at the west end of the Ferry Road car park and another option is at the ferry terminal car park. The project will be delivered as part of a broader EV project in Orkney in 2018/19 and an engineer has already been assigned to this work.
- Element 4: Electric Bus charging facility. This will be a bus charging point in one of the bus bays at the ferry terminal car park. Power is adjacent and hence the project should not present much in the way of technical challenge and will be delivered as part of the EV project.

2. Options Available

As the project has accepted the grant offer for the 4 project elements, the options are:

Option 1: To proceed with the project as planned on the basis that the risk profile is sufficiently mitigated to enable the project to be delivered within budget.

Option 2: Halt the project and return the grant offer on the basis that the project risks are too high to enable delivery within budget.

It is assessed that the risks are sufficiently understood and mitigated for Option 1 to be recommended.

3. Land Purchase Requirement

There are no land purchase requirements for this project.

4. Project Appraisal

Information in table below is in summary format with back-up retained, should further details be required.

	Criteria	Response
1.	Protects Existing Statutory Provision	There are no statutory requirements to provide any low carbon power supplies for any form of transport.
2.	Meets Corporate Priority / Community Planning Goal	The project is entirely consistent with the Council Plan for a Low Carbon Orkney.
3.	Protects Existing Assets	n/a
4.	Minimises Capital Cost	As the project is 87% externally funded (including the HITRANS contribution) and the other 13% will be recovered through charges, the project reduces the impact on capital costs to zero within a 10 year time frame.
5.	Maximises Investment from External Sources	At 84% external funding with the remaining 16% from charges (over 10 years), this project maximises external investment.
6.	Beneficial Impact on Revenue Expenditure	Whilst the project does not reduce revenue expenditure (other than for Serco Northlink which will see a reduction in diesel costs which will be replaced by less costly electricity), it does generate revenue income and hence has a beneficial impact on revenue budget in the medium/long term.
7.	Linked to Other Council Provision	The project links to council provision of transport services.
(a)	Enhances Statutory Provision	n/a
(b)	Protects or Enhances Discretionary Provision	The project enhances the discretionary provision of transport services, greatly enhances the provision of low carbon energy to transport services and assists in promoting active travel services through the addition of cycling facilities at Stromness.
8.	Re-use of Derelict Land or Building	n/a
9.	Promote or Enhance Orkney's Environment	The project will have a profound benefit to the air and noise quality of Stromness. The carbon reduction will be equivalent to some 870 diesel cars and the noise reduction overnight from the ferry will be 100%.
10.	Promote or Enhance Orkney's Heritage	n/a
11.	Economic Prosperity or Sustainable Communities	The project should have a beneficial impact on the renewable energy generation sector within Orkney and hence will support the sustainability of that sector through electricity usage/reduction in curtailment.
12.	Enhances Council operations or Improves Health and Safety	The improved air quality will have health benefits.

5. Financial Implications

The overall project cost, detailed at the annex, is estimated at £839,600 for the installation and commissioning of all equipment. 84% of this will be grant supported from the Scottish Government administered Low Carbon Transport Challenge Fund and by HITRANS with the remaining 16% funded, over 10 years from the sale of electricity. The net implication is therefore nil. There are no General Fund implications as the OIC contribution will be a capital allocation from Miscellaneous Piers and Harbours funds.

6. Risk Assessment

The installation of the electric vehicle charging facilities is considered low risk as the Council has experience of such projects, power supplies are adjacent to the chosen sites and the work will be overseen by OIC engineers who have been assigned to this work which will run parallel to another EV Charging Point works package utilising a separate grant for a range of other charging points.

The bicycle facility is also considered low risk as there is limited electrical works and the shelter will be of an off the shelf design. The pier location has already been selected.

The ship shore power system project has been the subject of previous work, mainly conducted by the contractor and hence the work package and equipment are well understood, SSE have assessed and agreed the power supply arrangements and the preferred supplier has already provided equipment to the vessel. Whilst this element carries the greatest risk, this is considered to be well within acceptable limits.

7. Conclusion

After submitting a Stage 1 CPA, having successfully completed the LCTT grant application and having initiated a range of work packages, it is clear that the project is now underway at an anticipated outturn costs within budget. The technologies for the bus, car and bicycle systems are mature but whilst the cold ironing shore power technology is mature per se, the usage for a ferry is innovative and will require the closest attention of the four project elements. The environmental benefits are significant and the broader outcomes and knowledge from the cold ironing projects will be of benefit to Orkney and to similar projects Scotland wide after this one.

8. Recommendations

It is recommended that the Stromness Multi Modal Low Carbon and Active Travel project continues as planned at an estimated and largely grant funded cost of £839,600.

9. Accountable Officers

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10. Annexes

Annex 1 – Capital Expenditure Analysis
Annex 2 – Revenue Expenditure Analysis

FINANCIAL ASSESSMENT OF CAPITAL EXPENDITURE

Annex 1

Committee:	Policy and Resources Committee
Capital Programme:	Miscellaneous Piers and Harbours
Project Name:	Stromness Multi-Modal Low Carbon Transport and Active Travel Hub

CAPITAL COSTS	Total £ 000	2018/19 £ 000	2019/20 £ 000	2020/21 £ 000	£ 000	£ 000	
1. Initial Costs (at inflated prices)							
Site / Property Acquisition	-	-	-	-	-	-	
Other Site Costs (including Fees)	-	-	-	-	-	-	
Construction / Improvements	-	-	-	-	-	-	
Information Technology Costs	-	-	-	-	-	-	
Plant & Equipment		530.5	229.3				
Vehicles	-	-	-	-	-	-	
Professional Fees - Consultant - Client	0.2	0.1	0.1	-	-	-	
Risk at 10%		55.5	24.0				
Gross Capital Expenditure	839.5	586.1	253.4	-	-	-	1
2. Initial Funding (at inflated prices)							
Government Grants ERDF LCTT	671.6	556.1	115.5	-	-	-	
Other Grants HITRANS	30.0	15.0	15.0	-	-	-	
Other Financial Assistance	-	-	-	-	-	-	
Total Grants Recievable, etc.	701.6	571.1	130.5	-	-	-	
Net Capital Cost of Project	137.9	15.0	122.9	-	-	-	
Net Council Capital Expenditure	137.9	15.0	122.9	-	-	-	
Net Present Value	130.5	14.6	115.8	-	-	-	2
Cost of Capital		3%	3%	3%	3%	3%	
Year		1	2	3	4	5	

Notes

- 1 To be funded from MPH Reserves
- 2 Assumed interest 2.7%
- 3 10% contingency
- 4 No land acquisition.
- 5 Assumed 10 year

PROJECT APPRAISAL REPORT - STAGE 2
FINANCIAL ASSESSMENT OF CAPITAL EXPENDITURE

Annex 2

Committee:	Policy and Resources Committee
Capital Programme:	Miscellaneous Piers and Harbours
Project Name:	Stromness Multi Modal Low Carbon Transport and Active Travel Hub

REVENUE COSTS / (SAVINGS)	Total £ 000	18/19 £ 000	19/20 £ 000	20/21 £ 000	21/22 £ 000	Onwards £ 000	Notes
1. Full Year Operating Costs (at inflated prices)							
Staff Costs	-	-	-	-	-	-	
Other Staff Costs (incl. recruitment, relocation, etc.)	-	-	-	-	-	-	
Property Costs - maintenance	7		2	2	2	2	
Supplies and Services -	-						
Transport, Vessel and Plant Costs							1, 2
Administration Costs	-	-	-	-	-	-	
Apportioned Costs	-	-	-	-	-	-	
Third Party Payments	-	-	-	-	-	-	
Transfer Payments - amortization electricity	78	-	20	20	19	19	
Miscellaneous Expenditure	-	-	-	-	-	-	
Gross Revenue Expenditure / (Saving)	85	-	22	22	21	21	
2. Full Year Operating Income (at inflated prices)							
Government Grants	-	-	-	-	-	-	
Other Grants	-	-	-	-	-	-	
Rents and Lettings	-	-	-	-	-	-	
Sales - electricity surplus	82		21	21	20	20	
Fees and Charges	3	-	1	1	1	1	
Miscellaneous Income	-						
Gross Revenue Income	85	-	22	22	21	21	
Net Revenue Expenditure / (Saving) of Project	0	-	0	-	0	-	
Increase / (Reduction) in Revenue Costs	0	-	0	-	0	-	
Net Present Value	0	-	0	-	0	-	
Cost of Revenue		3%	3%	3%	3%	3%	
Year		1	2	3	4	5	

Notes

1 Electricity to be sold at a surplus to cover amortized investment