

Executive Manager: Jan-Robert Riise
Director: Christine Ferguson

Governance and Law
Corporate Services Department
Montfield Offices
Burgh Road
Lerwick
Shetland , ZE1 0LA

Telephone: 01595 744550
Fax: 01595 744585
administrative.services@shetland.gov.uk
www.shetland.gov.uk

If calling please ask for
Leisel Malcolmson
Direct Dial: 01595 744599

Date: 21 August 2017

Dear Sir/Madam

You are invited to the following meeting:

Environment and Transport Committee
Council Chamber, Town Hall, Lerwick
Monday 28 August 2017 at 2pm

Apologies for absence should be notified to Leisel Malcolmson at the above number.

Yours faithfully

Executive Manager – Governance and Law

Chair: Mr R Thomson
Vice-Chair: Mr R McGregor

AGENDA

- (a) Hold circular calling the meeting as read.
- (b) Apologies for absence, if any.
- (c) Declarations of interest - Members are asked to consider whether they have an interest to declare in relation to any item on the agenda for this meeting. Any Member making a declaration of interest should indicate whether it is a financial or non-financial interest and include some information on the nature of the interest. Advice may be sought from Officers prior to the meeting taking place.
- (d) Confirm minutes of meetings held on (i) 6 March 2017, and 13 June 2017 (enclosed).

ITEM

1. Infrastructure Directorate Performance Report Quarter 1 - 2017/18
ISD-05
2. Development Directorate Performance Report – 2017/18
DV-32
3. Management Accounts for Environment & Transport Committee: 2017/18 – Draft
Outturn at Quarter 1
F-068
4. Implementation of Kerbside Recycling Collection Services
ES-02



Meeting(s):	Environment & Transport Committee	28 August 2017
Report Title:	Infrastructure Directorate Performance Report Quarter 1 – 2017/18	
Reference Number:	ISD-05-17-F	
Author / Job Title:	Maggie Sandison / Director of Infrastructure Services	

1.0 Decisions / Action required:

- 1.1 The Environment and Transport Committee should discuss the contents of this report and make any relevant comments on the achievements of the Directorate during the first quarter of 2017/18, note the progress against the priorities set out in the Directorate Plan, and contribute to the service planning process for the Infrastructure Directorate for future years.

2.0 High Level Summary:

- 2.1 This report summarises the activity and performance of the Infrastructure Directorate in 2017/18 quarter 1 up to the 30 June 2017, enabling members to analyse its performance against the Directorate's Service objectives and the Corporate Plan outcomes.

3.0 Corporate Priorities and Joint Working:

- 3.1 Effective Planning and Performance Management are key aspects of Best Value and features of "Our Plan", the Council's Corporate Plan 2016-2020.
- Our performance as an organisation will be managed effectively, with high standards being applied to the performance of staff and services. Poor performance will be dealt with, and good service performance will be highlighted and shared.

4.0 Key Issues:

- 4.1 The Directorate's objectives as detailed in the Directorate Plan are the outcomes the Directorate aims to deliver in the year. We said "**what we must do in 2017/18**" was:
- reliably and safely deliver our day to day services that meet the needs of our customers;
 - meet our statutory requirements and deliver compliant services;

- deliver our objectives to ensure the Corporate Plan commitments are met;
- maintain our existing assets;
- protect the environment and reduce the environmental impact of our activities;
- address inequality- supporting those most in need and not making inequalities worse;
- provide best value for the public funds invested in our services and infrastructure;

Progress on Corporate Plan Outcomes

4.2 The Directorate is leading on the Corporate Plan Commitment to Clarify ***the Council's future role in the Port of Sullom Voe***. This is business, which is reported to the Harbour Board.

4.3 The Directorate are also contributing substantially to the Transport Planning projects to ***understand the options and investment required to create a sustainable internal transport system over the next 50 years*** and ***People booking and paying for journeys on our ferries using efficient and effective systems***.

Directorate Achievements in 2017/18

4.4 Appendix A shows progress on the key projects and actions the Directorate set out to complete or substantially progress in 2017/18. The progress on these actions is on track.

4.5 Appendix B shows the Council wide indicators and the Key Directorate Indicators to enable the Committee to monitor service delivery against our performance targets and our Directorate Objectives in 4.1.

4.6 Infrastructure Services, Estate Operations takes the corporate lead in supporting the change required to deliver the actions in the council's Carbon Management Plan in order to reduce the Council's energy consumption and carbon emissions. Savings in energy usage can reduce the cost of service delivery and protects against rising energy costs. Appendix D sets out a progress statement. This demonstrates that both energy usage and carbon emissions are reducing from the 2015/16 baseline and shows what has driven the change. Some of the activities which contributed to this change during 2016/17 were,

- Aith Junior High School plant room and distribution system upgrade works
- Sound Primary School external fabric works (roof)
- Investor turbines - installations completed at Gremista and Waste Handling Facility
- Ferry terminal upgrades including energy efficiency works completed at Bressay and Laxo
- Lighting projects completed at various schools, care homes, offices and ferry terminals / piers
- Street lighting contract completed, circa 130 street lights (and columns) replaced with LED fittings

- Upgrading of heating / heating controls at Happyhansel Nursery, Seaview / New Craigielea
- SEEP1 funding bid submitted for energy efficiency works on properties (both commercial and domestic) fed by Lerwick District Heating Network. Funding awarded and works ongoing.
- Home Energy Efficiency Programmes for Scotland: Area Base Scheme (HEEPSABS) funding was applied for during the pre-election period using the Director's delegated authority. Shetland Island Council has been awarded £1.1 million for fuel poverty grant funded works for 2017/18
- Energy Manager software upgraded and contacts established in buildings with Energy dashboard software purchased for Managers use (being rolled out to enhance their ability to manage their own energy use)
- Telematics project developed for Council vehicle fleet – installed and operating demonstrating a reduction in fuel usage across the fleet.
- Further 2 electric vans acquired through grant funding
- Charging infrastructure installed at Gremista Depot for the electric vans

4.7 A statistical study has also been undertaken to consider the wider environmental benefits of the Shetland Animal Health Scheme, which is operated and funded through Environmental Health. This study is attached as Appendix E. The report sets the scene that whilst sheep numbers are remaining static after the removal of the headage payment, there has been a substantial reduction in cattle numbers in recent years. However, the cattle herds have been made healthier which means that the greenhouse emissions from the herds will have reduced directly due to the intervention of the Council's Health Schemes. The BVD scheme has reduced the incidence of BVD from 13% to 0% and the Johnes Scheme has reduced disease prevalence by 18.10% since it started in 2008. The combined impacts of the schemes has lowered greenhouse gas emissions by 4.13 tonnes of CO₂ equivalent per 100kg beef carcass which is, as a comparator, the level of emissions from the energy use of an average house for 116 days. Whilst there are not currently any equivalent studies for sheep disease, the Animal Health Scheme Officers are exploring opportunities to develop a similar model, which would analyse the environmental benefits of the elements of the scheme that have been successfully controlling sheep diseases.

Risk and Service Challenges

4.8 Performance monitoring and performance reporting must also consider the areas of risk arising from our operations, the service challenges the Directorate faces, actions and projects which have not progressed as planned and where we don't meet Performance Indicator Benchmarks:

- Failure to respond to Scottish Government's target for recycling 70% of waste by 2025- we achieve 13% recycling currently **Corrective Action-** New recycling service being developed for roll out in July 2018, subject to approval by this Committee.
- There is an increasing risk of operating ferry services with aging vessels, which

has resulted in increased significant remedial works, required to maintain vessels in service, which has driven up drydocking costs. The additional work requires increased time in drydock, resulting in service disruptions and creates an ongoing budget pressure on the service and directorate budgets. **Corrective Action-** the Council is pursuing capital funding for a vessel replacement programme from Scottish Government.

- **Skills Shortage-** the Directorate has identified a number of areas where there is a turnover of staff with critical skills where there is a challenge to recruit to vacant posts- Marine posts, HGV Drivers, Engineers, Electricians. **Corrective Action-** Services are developing Apprenticeships and Career Grades to respond to the skills gap, which is anticipated due to the demographic profile of the workforce. Work has been tendered to external contractors to address skills gaps however there is also a capacity issue within the private sector so some programmes of planned maintenance work are delayed due to staff vacancies combined with the lack of capacity of contractors to complete planned maintenance programmes on time. Outsourcing work, which has previously been delivered in house, can create additional budget pressures although this is offset against the saving in staffing costs due to the vacancy.

4.9 The Directorate Risk Register in Appendix F sets out the strategic risks which might prevent the Directorate from achieving its objectives in 4.1. The Committee should consider whether additional control measures could be applied to reduce the risk of circumstances giving rise to a negative impact on Directorate Performance.

5.0 Exempt and/or confidential information:

5.1 None

6.0 Implications :	
6.1 Service Users, Patients and Communities:	Effective performance management and continuous improvement are important duties for all statutory and voluntary sector partners in maintaining appropriate services for the public. The Directorate uses customer feedback and complaint analysis to drive service change and service improvement.
6.2 Human Resources and Organisational Development:	There are a number of actions in this service plan with staffing implications. Care is taken to ensure that staff are involved and informed about changes that might affect them, that HR are closely involved and that relevant Council policies are followed. Ensuring staff feel valued and supported especially through periods of challenge and change is a key consideration for the Directorate Management team.
6.3 Equality, Diversity and Human Rights:	The Directorate uses Equalities Impact assessment to ensure its services are supporting those most in need and not making inequalities worse;
6.4 Legal:	The Directorate delivers statutory services, monitoring performance provides assurance that statutory requirements are met and the Council complies with its duties in delivering Services.
6.5 Finance:	The actions, measures and risk management described in this report within the remit of Environment & Transport Committee are projected to be achieved within existing approved budgets.
6.6 Assets and Property:	A number of the actions in the Directorate Plan relate to maintenance and replacement of Infrastructure and Council assets to maintain delivery of services to the people of Shetland. The aging infrastructure, skills shortage and pressure on capacity in the private sector are creating challenges to maintain service delivery within budget.
6.7 ICT and new technologies:	None
6.8 Environmental:	The Directorate leads the delivery of the Council's Carbon Management Plan and delivers a programme of works to reduce energy usage across the Council's assets. A progress statement is included in the report and the appendices.
6.9 Risk Management:	<p>Embedding a culture of continuous improvement and customer focus are key aspects of the Council's improvement activity. Effective performance management is an important component of that which requires the production and consideration of these reports. Failure to deliver and embed this increases the risk of the Council working inefficiently, failing to focus on customer needs and being subject to negative external scrutiny.</p> <p>Risk management is a key component of the performance cycle and the Directorate Plan actions are determined to be priorities to manage the Directorate risks.</p>

6.10 Policy and Delegated Authority:	<p>The Council's Constitution – Part C - Scheme of Administration and Delegations provides in its terms of reference for Functional Committees (2.3.1 (2)) that they;</p> <p>“Monitor and review achievement of key outcomes in the Service Plans within their functional area by ensuring –</p> <p>(a) Appropriate performance measures are in place, and to monitor the relevant Planning and Performance Management Framework.</p> <p>(b) Best value in the use of resources to achieve these key outcomes is met within a performance culture of continuous improvement and customer focus.”</p>	
6.11 Previously considered by:	<i>None</i>	

Contact Details:

Maggie Sandison, Director of Infrastructure Services,

director.infrastructure@shetland.gov.uk

8 August 2017

Appendices:

Appendix A – Progress on the Directorate Projects and Actions

Appendix B- Key Directorate Indicators and Council Wide Indicators Appendix C – Complaints Summary

Appendix D – Carbon Management Plan Progress Statement

Appendix E – Animal Health Scheme Environmental Benefit Study

Appendix F – Risk Register

Background Documents:

[Infrastructure Services Directorate Plan 2017/18](#)

Appendix A - Projects and Actions - Infrastructure Directorate Plan


Generated on: 17 August 2017

OUR PLAN 2016-2020




A) YOUNG PEOPLE

- 2) Vulnerable Children and young people's opportunities Children and young people, particularly those from vulnerable backgrounds, will be accessing the learning and development opportunities that allow them to best fulfil their potential.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP137 Promote Apprenticeships through Procurement	Review Infrastructure procurement contracts to promote modern apprenticeships	Support the Shetland Learning Partnership to provide opportunities - young people need to get jobs.	Planned Start	01-Apr-2017		New Contracts which are issued with Apprentice conditions.	Infrastructure Services Directorate
			Actual Start	03-Aug-2017	<div><div>25%</div></div>		
			Original Due Date	31-Dec-2019	Expected success		
			Due Date	31-Dec-2019			
			Completed Date		Likely to meet or exceed target		

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP211 Promote apprenticeships through employment.	Provide apprenticeships, vocational training and work experience placements to support the Shetland Learning Partnership in providing opportunities for young people to get jobs	Younger workforce, reduced problems with succession planning, retaining more local talent	Planned Start	01-Apr-2017		The Directorate aims to increase apprentice placements to fill vacancies and skills gaps identified through workforce planning. This is the first cycle and provides a baseline to assess progress. Currently we have 13 apprentices across the department with two having successfully completed in 17/18.	Infrastructure Services Directorate
			Actual Start	01-Apr-2017	<div><div>25%</div></div>		
			Original Due Date	31-Mar-2020	Expected success		
			Due Date	31-Mar-2020			
			Completed Date		Likely to meet or exceed target		




- 6) Physical and cultural activities More children will be taking part in physical and cultural activities – developing healthy lifestyles for playing a full and active part in Shetland community life.



Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP212 Expand Safe Cycle Routes	Secure external funding to expand safe cycle routes and walking routes to schools to encourage children to take part in healthy lifestyles to help them play a full and active part in Shetland community life.	Increased activity throughout life, lower carbon emissions.	Planned Start	01-Apr-2017		A group has been formed from interested parties to action schemes via Participatory Budgeting. Initial meetings held and currently collating ideas of potential schemes. Likely that due to time constraints that a full PB exercise will not be undertaken until 2018/19 but schemes will be actioned by the group this year to make best use of the Cycling, Walking Safer Streets grant.	Infrastructure Services Directorate
			Actual Start	17-Apr-2017			
			Original Due Date	31-Mar-2020	Expected success		
			Due Date	31-Mar-2020			
			Completed Date		Likely to meet or exceed target		

C) ECONOMY & HOUSING

2) Diverse businesses



We will have a culture of helping new businesses to start up and businesses to grow, as well as having a thriving 'social enterprise sector' of businesses that give something back to the community.



Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP067 Develop the Scalloway Harbour business plan	Investigate options for developing Scalloway Harbour and present reports to members	Effective operations and financial planning	Planned Start	02-Mar-2015		Outline business case for refurbished / extended Scalloway Fishmarket approved by Council October 2016. Professional advisors being appointed. Full business Case to be reported February 2017.	Harbour Master & Port Operations
			Actual Start	02-Mar-2015			
			Original Due Date	31-Mar-2016	Expected success		
			Due Date	07-Feb-2017			
			Completed Date	15-Feb-2017	Likely to meet or exceed target		

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
PH-17-20 Scalloway Fishmarket Redevelopment	Agree redevelopment option, obtain permissions, procure works, implement and commission	Determine and implement the preferred option for the future of Scalloway Fishmarket	Planned Start	01-Apr-2017		Outline Business Case approved by Council in October 2016. Professional advisors appointed and Full Business Case largely developed including submission of planning and building control applications. Full Business Case to be completed with support from Finance / Capital Programme / Procurement and submitted to Asset Investment Group with target of recommendation to Council in October meeting cycle.	Harbour Master & Port Operations
			Actual Start	30-May-2017	<div><div>35%</div></div>		
			Original Due Date	31-Oct-2019	Expected success		
			Due Date	31-Oct-2019	 Likely to meet or exceed target		
			Completed Date				

6) Sullom Voe future

We will have made the council's future role in the port of Sullom Voe clear and we will be seeing the best possible returns from our investments.




Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP097 Sullom Voe Harbour future	Achieve a sustainable future for Sullom Voe Harbour in partnership with Government and the Oil industry	Corporate Plan outcome of the Council's future role in the port of Sullom Voe being clear	Planned Start	01-May-2016		Harbour Board and Policy and Resources Committee have considered the strategic options generated in the outline business case and confirmed that further analysis and market testing should be undertaken to establish the economic, commercial and financial information to support these options. A Member's seminar was held on 11 May with PWC presenting the results of market testing. Further study has been undertaken to understand shuttle tanker economics and the opportunities for the Port of Sullom Voe. The report has been received and presented to Harbour Board members at a seminar.	Infrastructure Services Directorate
			Actual Start	12-May-2016	<div><div>100%</div></div>		
			Original Due Date	31-Mar-2016	Expected success		
			Due Date	30-Apr-2017	 Likely to meet or exceed target		
			Completed Date	30-May-2017			

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP107 VTS Radar at Sullom Voe	Replace VTS Radar at Sullom Voe to maintain safe operations	A modern, fully equipped harbour able to adapt to changes in use and legislation	Planned Start	01-Apr-2015		Tenders were back December 2016. Award March 2017	Infrastructure Services Directorate
			Actual Start	01-Apr-2015	<div><div></div>100%</div>		
			Original Due Date	31-Mar-2016	Expected success		
			Due Date	30-Jun-2017			
			Completed Date	30-May-2017	Likely to meet or exceed target		

E) CONNECTION & ACCESS







1) Community transport solutions

There will be transport arrangements in place that meet people's needs and that we can afford to maintain in the medium term.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP068 Small ports development/main maintenance plan	Small ports development/maintenance plan developed to decide future of these assets A small ports condition survey and major maintenance works report was submitted to the Harbour Board on the 18th August 2014	Effective operations and financial planning Small Ports Maintenance / Development plan sufficiently complete to allow individual projects to be timetabled and / or implemented for next year and future years as far as possible.	Planned Start	02-Mar-2015		Toft pier option appraisal report developed. Toft Pier SNC approved P&R 15 February 2016 2016/17 works being carried out. Anticipated expenditure in 2017/18 and future years approved in October 2017 for Capital Programme and Revenue budget development. Action taken: 2016/17 works confirmed in asset investment plan approved by Council on 10th February 2016.	Harbour Master & Port Operations
			Actual Start	02-Mar-2015			
			Original Due Date	31-Mar-2016	Expected success		
			Due Date	31-Mar-2017	 Experiencing issues, risk of failure to meet target		
			Completed Date	30-May-2017			

5) Sustainable transport arrangements

Our communities will feel better connected using new community transport solutions developed by communities themselves.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP089 Ferry Replacement	Develop a Ferry Replacement Programme	Ongoing discussions with the Scottish Government. It is anticipated that a decision will be made in the coming weeks rather than months	Planned Start	10-Jan-2016		Ferry assets and terminal assets assessed as part of Inter Island Project. The draft report is due to go to public consultation on the 22nd august 2016. Capital options from SIITS report to be presented to Council by Transport Planning. It is anticipated that we will have a decision on revenue costs by the 4th Quarter 2016/17. Capital costs will not be agreed until 2017. Discussions are still ongoing with Transport Scotland on the provision of funding	Infrastructure Services Directorate
			Actual Start	10-Jan-2016	<div><div>30%</div></div>		
			Original Due Date	30-Jun-2016	Expected success		
			Due Date	31-Jan-2018	 Experiencing issues, risk of failure to meet target		
			Completed Date				
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP098 Secure external funding for ferry terminals	Secure external funding to deliver the accessibility improvements to ferry terminals	Sufficient funds are available to maintain, repair and develop Ferry Terminal Infrastructure	Planned Start	01-Feb-2016		Funding secured for DDA improvements to Terminals. Overall funding by Ferry Operations. Laxo & Bressay ferry terminal completed to a high standard. Roll out of remainder to be scheduled. Additional funding secured from Transport Scotland.	Infrastructure Services Directorate
			Actual Start	17-Feb-2016	<div><div>75%</div></div>		
			Original Due Date	31-Mar-2016	Expected success		
			Due Date	31-Dec-2017	 Likely to meet or exceed target		
			Completed Date				
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP605 Leirna life extension	Inspect / repair steelwork, improvements to vessel, equipment, navigation equipment and lighting; to increase life expectancy of vessel.	Maximum life from existing assets	Planned Start	29-May-2017		Completed works to date - Renew forward and aft ballast tanks, hull plating and frames. Shot blast and paint out both both ballast tanks. Passenger saloon seating renewed. Passenger saloon floor covering renewal, upper, lower and stairway. Vehicle loading ramps to be removed and main hinges renewed. External ladders to passenger saolon x 2 and brdige x 3, steps under non slip to renew. Hydraulic ram replacement - part complete.	Ferry Operations
			Actual Start	03-Mar-2017	<div><div>60%</div></div>		
			Original Due Date	31-Dec-2018	Expected success		
			Due Date	31-Dec-2018	 Likely to meet or exceed target		
			Completed Date				

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP606 Geira life extension	Inspect / repair steelwork, improvements to vessel, equipment, navigation equipment and lighting; to increase life expectancy of vessel.	Maximum life from existing assets	Planned Start	01-Nov-2018		Planned start date is 1 November 2018. Planning works are underway.	Ferry Operations
			Actual Start		<div><div></div></div> 0%		
			Original Due Date	31-Mar-2020	Expected success		
			Due Date	31-Mar-2020			
			Completed Date		Likely to meet or exceed target		

6) Internal transport investment

We will have a clearer understanding of the options and the investment needed to create a sustainable internal transport system over the next 50 years.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP350 Progress the Business case for the complete replacement of the current street lighting with LED	Reduce the running costs and carbon footprint from the street lighting asset whilst improving the asset	Ensure Shetland's public road network is maintained and improve. This will support the Council's Aim under Connection and Access to "Provide quality transport services within Shetland," and "There will be transport arrangements in place that meet people's needs and that we can afford to maintain in the medium term." Also 20 by 20 "We will have reduced the effect we have on the local environment, particularly reducing carbon emissions from our work and buildings."	Planned Start	01-Apr-2016		Column assessment delayed due to weather but now almost complete. Business case to follow summer 2017.	Roads
			Actual Start	04-Apr-2016	<div><div></div></div> 70%		
			Original Due Date	31-Mar-2017	Expected success		
			Due Date	30-Sep-2017			
			Completed Date		Likely to meet or exceed target		

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP662 Promote the new 20 mph speed limits required at the new AHS and Lerwick's north crescents.	Safe routes to school for pupils and improved environment for residents and other members of the public.	Relevant traffic orders made if Council in agreement.	Planned Start	01-Apr-2016		AHS 20mph order advertised and awaiting comment. Lerwick crescents to follow later in the year following report to RSAP and E&T Committee.	Roads
			Actual Start	26-May-2017	<div><div></div></div> 10%		
			Original Due Date	31-Mar-2018	Expected success		
			Due Date	31-Mar-2018			
			Completed Date		Likely to meet or exceed target		

F) OUR "20 BY '20"

02) Staff value & motivation

Our staff will feel valued for their efforts and want to stay with us because they feel motivated to do their very best every time they come to work.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP103 Employee review & development	Undertake 100% of the employee review development plans	All staff to receive ERD to improve staff engagement and enable training analysis.	Planned Start	01-Jan-2017		New policy has been rolled out and review meetings with staff are underway.	Infrastructure Services Directorate
			Actual Start	01-Jan-2017	<div><div>15%</div></div>		
			Original Due Date	31-Dec-2017	Expected success		
			Due Date	31-Dec-2017			
			Completed Date		Likely to meet or exceed target		

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP210 "Making a Difference" Staff Training	Training programme for Infrastructure staff on "Making a Difference" to address loneliness and stigma	Employees recognise their role in addressing inequalities and supporting the most vulnerable.	Planned Start	01-Jun-2017		2% of staff have booked on this course to date - managers have been asked to organise area based training for their teams.	Infrastructure Services Directorate
			Actual Start	16-Aug-2017	<div><div>2%</div></div>		
			Original Due Date	31-Dec-2019	Expected success		
			Due Date	31-Dec-2019			
			Completed Date		Likely to meet or exceed target		

05) Standards of governance

High standards of governance, that is, the rules on how we are governed, will mean that the council is operating effectively and the decisions we take are based on evidence and supported by effective assessments of options and potential effects.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP104 Regulators	Positive audits from our regulators with no serious non-conformances identified	Continued adherence to all current standards applicable to our operations.	Planned Start	01-Apr-2017		Target met year to date.	Infrastructure Services Directorate
			Actual Start	01-Apr-2017	<div><div>25%</div></div>		
			Original Due Date	31-Mar-2018	Expected success		
			Due Date	31-Mar-2018			
			Completed Date		Likely to meet or exceed target		

06) Financial management

Excellent financial management arrangements will make sure we are continuing to keep to a balanced and sustainable budget, and are living within our means.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP213 New Financial Restrictions	Develop 18-19 sustainable budget to assist in meeting £20m by 2020 target	Long-term financial stability.	Planned Start	01-Apr-2017		Executive Managers tasked to develop no growth budget and identify changes to deliver efficiency and savings.	Infrastructure Services Directorate
			Actual Start	01-Apr-2017	<div><div>5%</div></div>		
			Original Due Date	31-Dec-2017	Expected success		
			Due Date	31-Dec-2017			
			Completed Date		Likely to meet or exceed target		

07) Procurement

Our arrangements for buying goods and services will be considered to be efficient and provide ongoing savings.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP213.4 Fleet Replacement Programme 2017/18	Put in place a fit for purpose vehicle and plant fleet which is correctly sized to meet current operational needs.	Reduce the average age of the fleet and revenue running costs associated with the age and obsolescence of a significant portion of the current vehicle fleet while minimising disruption and downtime due to an increased incidence of breakdown.	Planned Start	01-Apr-2017		See Appendix D - Replacement Schedule 2017/18 of the Service Need Case – Vehicle and Plant Replacement Programme.	Estate Operations
			Actual Start	03-Aug-2017	<div><div>25%</div></div>		
			Original Due Date	31-Mar-2018	Expected success		
			Due Date	31-Mar-2018			
			Completed Date		Likely to meet or exceed target		



15) Assets

We will have a better understanding of the number of assets we can afford with the resources we have available, and will have reduced the number of buildings we have staff in.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP215.6 Building Maintenance Capital Works Programme 2017/18	Deliver the projects set out on Service Need Case "Building Maintenance Capital Works" itemised in Appendix 1 of the report.	Customers happy, programme delivered on time, on budget and to a high quality.	Planned Start	01-Apr-2017		Works delivered as part of normal maintenance delivery. On site and on programme to deliver.	Estate Operations
			Actual Start	01-Mar-2016	<div><div>25%</div></div>		
			Original Due Date	31-Mar-2018	Expected success		
			Due Date	31-Mar-2018			
			Completed Date		Likely to meet or exceed target		


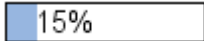







16) Prioritise spending



We will have prioritised spending on building and maintaining assets and be clear on the whole-of-life costs of those activities, to make sure funding is being targeted in the best way to help achieve the outcomes set out in this plan and the community plan.

Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP219 FM Review - Phase 1	It has been recognised that we operate a number of in-house services across all five Directorates which broadly sit under the banner of "hard" and "soft" facilities management. It is proposed that we review overlapping service areas with the aim of identifying the potential benefits of integrating Hard & Soft FM, Energy & Procurement and Fleet Services.	<p>The primary aim is to avoid 'duplication of both effort and resources' (management & supervision) while identifying both financial and operational efficiency savings. This will include workforce analysis, workforce planning and the continuation and extension of the multi-skilling and career grading programme. It is proposed that Phase 1 will be carried out by the Association for Public Service Excellence (APSE). The main output from Phase 1 will be a high level report setting out the findings of the review and key actions for the future. This will include recommendations highlighting areas which could be examined further to consolidate resources and release efficiency savings.</p> <p>Phase 2 will take forward and develop the preferred operating model. It will outline the 'as-is' state, the 'to-be' state, and the step changes required to achieve the preferred operating model. It will also set out the planning and control elements that need to be considered to plan, design and deliver this complex project, focussing on the actual transition while maintaining "business as usual" during the change process.</p>	Planned Start	03-Apr-2017		Awaiting formal budget provision. BJC report submitted for approval.	Estate Operations
			Actual Start	12-Apr-2017	<div><div>5%</div></div>		
			Original Due Date	31-Mar-2018	Expected success		
			Due Date	31-Mar-2021			
			Completed Date		Experiencing issues, risk of failure to meet target		

17) Carbon reduction

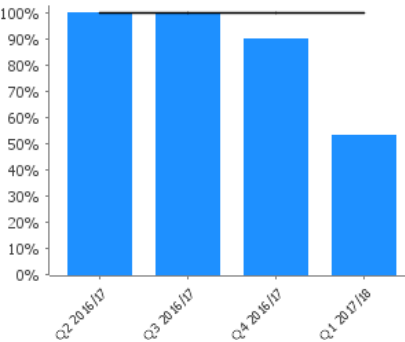
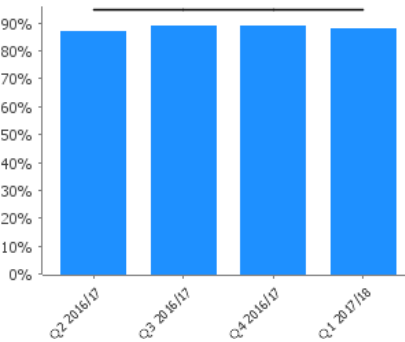
We will have reduced the effect we make on the local environment, particularly reducing carbon emissions from our work and buildings.

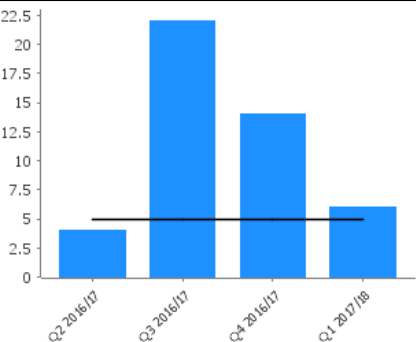
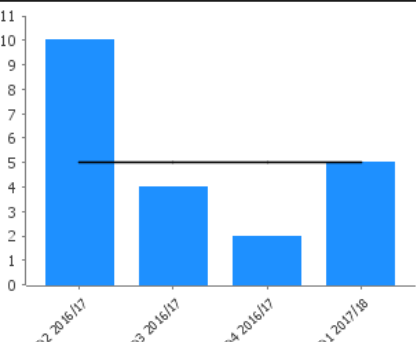
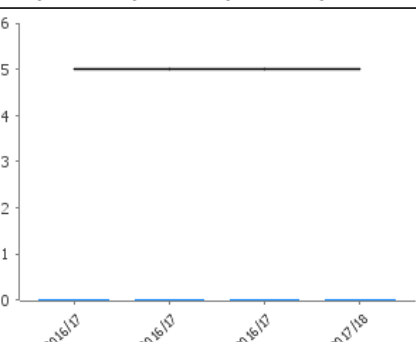
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP109 Local climate impacts report	Local climate impacts report to assess the impact and risk of extreme weather events and develop a climate change adaption plan	Help protect Shetland's natural environment while embedding climate change mitigation into all relevant Council policies and procedures.	Planned Start	18-Jan-2016		Collaborative leadership project to capture climate change impacts is being facilitated. Part of this work has been included in the SEEP2 project (See SP217.04D) and the collaborative leadership programme. The original due date was too ambitious given the scope and scale of the overall Carbon Management Plan and the training needs which have become apparent during rollout.	Infrastructure Services Directorate
			Actual Start	15-Aug-2016			
			Original Due Date	31-Mar-2018	Expected success		
			Due Date	31-Mar-2018			
			Completed Date		Experiencing issues, risk of failure to meet target		
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP111 Waste Strategy & Recycling Collection	Implement recycling collection across Shetland and redesign the waste service to prepare for further legislative changes	Because of the current waste strategy in Shetland with generating heat from waste burn the recycling waste collection is unlikely to change in the immediate future.	Planned Start	01-Apr-2015		Committee approval for adoption of Waste Charter received on 3 October 2016.	Infrastructure Services Directorate
			Actual Start	14-Nov-2016			
			Original Due Date	31-Mar-2016	Expected success		
			Due Date	31-Mar-2019			
			Completed Date		Likely to meet or exceed target		
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP138 Increase Contactor's Energy Efficiency capacity	Increase capacity of certified contractors able to deliver energy efficiency works	Maximise draw down of grant schemes and retrofit works to address poverty.	Planned Start	01-May-2017		Training course being developed to increase skill base within Shetland.	Estate Operations
			Actual Start	03-Aug-2017			
			Original Due Date	31-Dec-2019	Expected success		
			Due Date	31-Dec-2019			
			Completed Date		Likely to meet or exceed target		

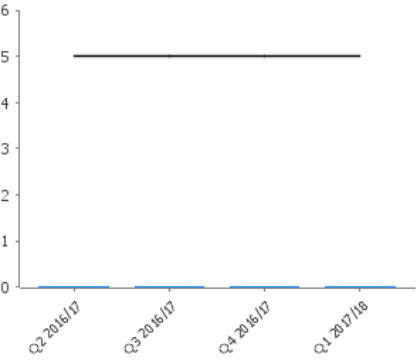
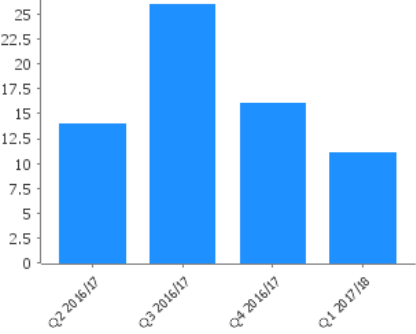
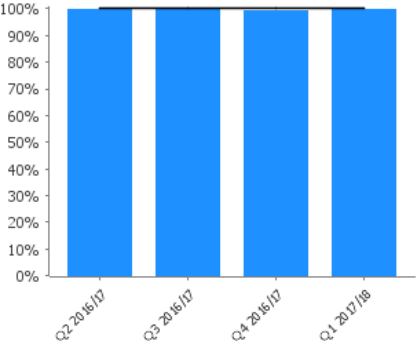
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
SP217 Carbon Management Plan – Implementation	To implement the actions, programmes and projects set out in the Carbon Management Plan	To work in partnership with Community Planning partners to reduce costs and share best practice in carbon and climate change management, specifically - Efficiencies - Better use of resources - Legislative compliance.	Planned Start	01-Apr-2015		The items listed on the action plan are in the process of being put in place. The Project Board met in August and agreed action plan priorities.	Estate Operations
			Actual Start	04-May-2015	<div><div>83%</div></div>		
			Original Due Date	31-Mar-2016	Expected success	Various projects under the CMP heading have been initiated and are ongoing. The 2017 CMP Update and Highlight Reports are now available which show progress to date.	
			Due Date	31-Mar-2020	 Likely to meet or exceed target		
			Completed Date				

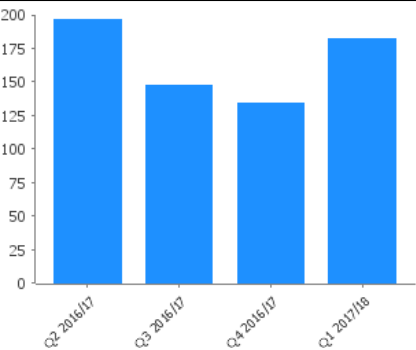
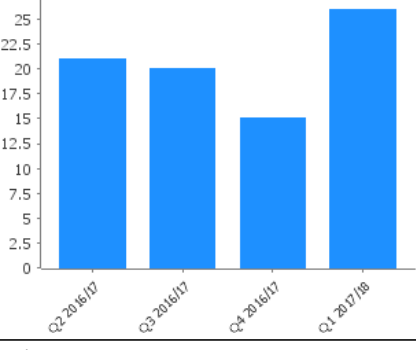
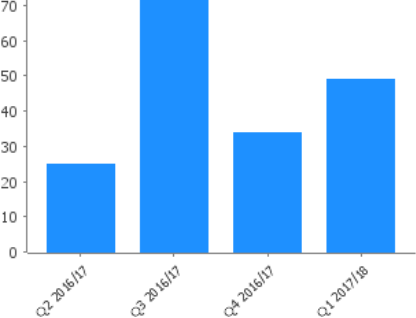
Appendix B Performance Indicators (Quarterly)- Infrastructure Services Directorate

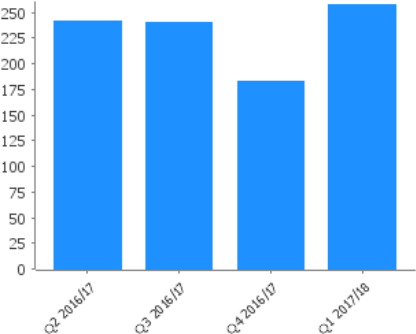
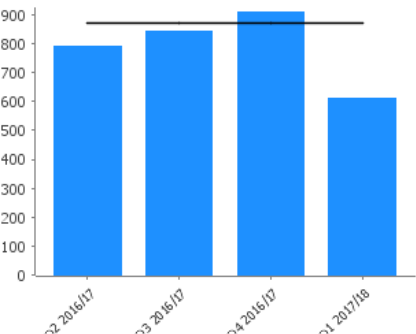
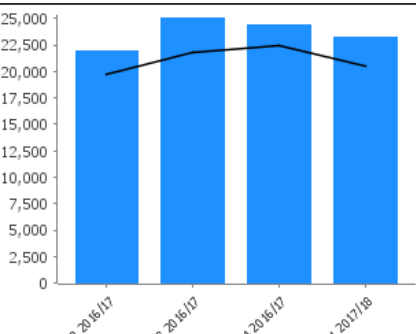
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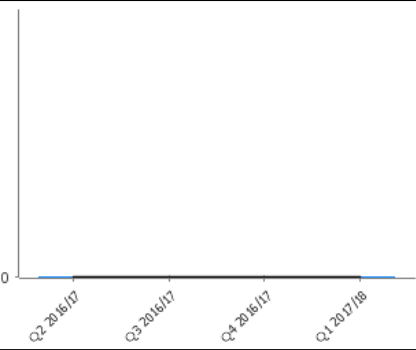
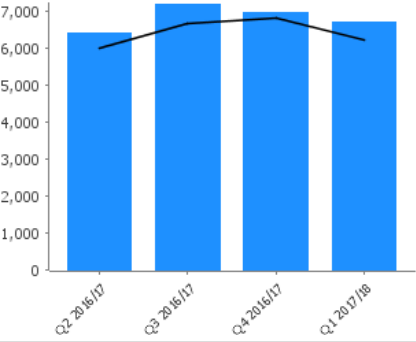
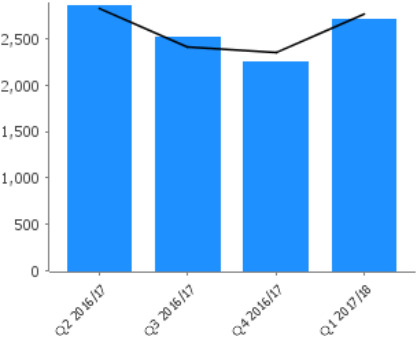
Code & Short Name	Previous Years		Quarters				Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18			
	Value	Value	Value	Value	Value	Value	Target		
HN02 Food Hygiene Inspection Programme completed	88%	90%	100%	100%	90%	53%	100%		<p>Performance: The figures show that we have not achieved our target, which was anticipated due to the increase in demand for the service, increase in statutory functions and staff illness.</p> <p>Improvement: The increase in demand for other areas of the service mean that improvement will be a challenge. Two staff are now in different stages of study towards an MSc in Environmental Health via distance learning to qualify as EHO's. The overall process takes approximately four years each not including professional examinations. This adds a further load to our small team in terms of study time and appropriate training.</p>
HN03 Premises achieving PASS standard in Food Hygiene Information Scheme	82%	88%	87%	89%	89%	88%	95%		<p>Performance</p> <p>Performance: The figures show that we have not achieved our target, which was anticipated due to the increase in demand for the service, increase in statutory functions and staff illness.</p> <p>Improvement: The increase in demand for other areas of the service mean that improvement will be a challenge. Two staff are now in different stages of study towards an MSc in Environmental Health via distance learning to qualify as EHO's. The overall process takes approximately four years each not including professional examinations. This adds a further load to our small team in terms of study time and appropriate training.</p>

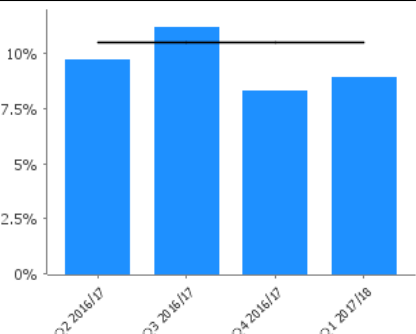
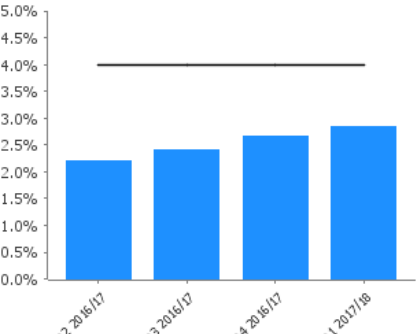
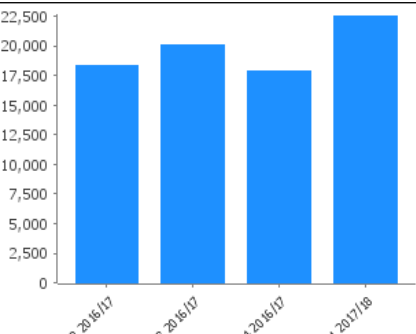
Code & Short Name	Previous Years		Quarters				Q1 2017/18 Target	Graphs	(past) Performance & (future) Improvement Statements
	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18			
	Value	Value	Value	Value	Value	Value			
HF10a Lost sailings by cause - Adverse Weather	311	43	4	22	14	6	5		Performance: Weather effected cancellation are continuing to reduce Improvement: Continue dialogue in relation to contingency planning
HF10b Lost sailings by cause - Breakdown	102	36	10	4	2	5	5		Performance: Reduce the number of service related breakdowns Improvement: This target is getting harder to achieve due to the age of the fleet and key component parts reaching a "life expired" stage. We will however continue to work with our engineers, supplier and contractor to minimise service disruption
HF10c Lost sailings by cause - Crew	16	0	0	0	0	0	5		Performance: It would be difficult to achieve 100% compliance Improvement: continue with a robust approach to absence management and ensure that the relief panel is updated and maintained at an effective level

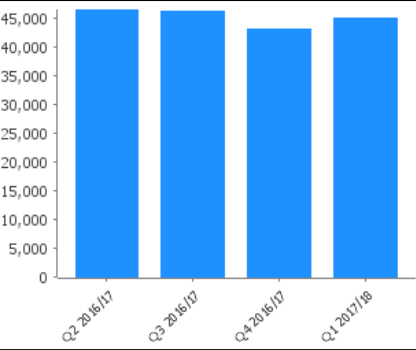
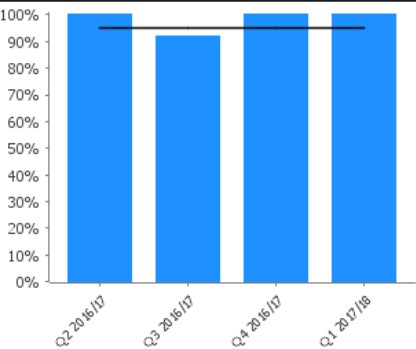
Code & Short Name	Previous Years		Quarters				Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18			
	Value	Value	Value	Value	Value	Value	Target		
HF10d Lost sailings by cause - Other	24	0	0	0	0	0	5		Performance: It will be difficult to achieve the current target Improvement: Continue to work with crew, suppliers and contractor to reduce days lost
HF10T Lost sailings - TOTAL	453	79	14	26	16	11			Improvement Continue to monitor reasons for lost sailing and identify trends where possible. Additional focus on key systems and components due to the age profile of the fleet
HF11 Overall Ferry Availability	99.32%	99.72%	99.88%	99.6%	99.11%	99.93%	100%		Continue to work with crews & suppliers to identify and rectify any issues that may have an impact on availability

	Previous Years		Quarters						
Code & Short Name	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value	Target		
HH01a Tingwall Airport Landings - Islanders	905	694	196	147	134	182			Performance: Scheduled delivery of service unless weather disruption. Data only no target. Improvement: Continued dialogue with operators to keep them apprised of the airport's services and availability.
HH01b Tingwall Airport Landings - Air Ambulance	72	86	21	20	15	26			Performance: Improved dialogue with operators highlighting the range and quality of the services available at the airport and about the airport's flexible working arrangements. Data only no target Improvement: Continued dialogue with operators to keep them apprised of the airport's services and availability.
HH01c Tingwall Airport Landings - Other	136	163	25	73	34	49			Performance: Improved dialogue with both commercial operators and the General Aviation community highlighting the range and quality of the services available at the airport. Data only no target. Improvement: Continue to improve the dialogue with all parties and keep them apprised of the airport's services and availability.

	Previous Years		Quarters						
Code & Short Name	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value	Target		
HH01T Tingwall Airport Landings - TOTAL	1,113	943	242	240	183	257			<p>Performance: A number of factors outwith the control of the airport, i.e. weather conditions - impacts o landings overall. Data only no target</p> <p>Improvement: The airport will use new and established means to promote the services available to increase landings.</p>
HS01 Reactive jobs completed by Building Services	3,389	3,327	792	840	910	611	870		<p>Performance: Our planned maintenance budget has reduced and this is an indicator of whether this is resulting in more reactive workload due to less planned maintenance (Quarterly)</p> <p>Improvement: This indicator is helping us to establish a trend in reactive maintenance as the budget provision for proactive and planned work reduces to reduce revenue expenditure in services. A higher proportion of planned works with correspondingly lower number of reactive works is the target. Due to staff absence the figures for July are estimates.</p>
HH02 Council Energy Consumption (MWh)	100,242	93,340	21,959	25,097	24,347	23,172	20,506		<p>Performance: Reducing energy usage saves Council budgets and reduces CO2 (Quarterly). Cold winter impact compared to mild winter.</p> <p>Improvement: Action plan to reduce energy usage is being implemented using spend to save funding and green loans.</p>

Code & Short Name	Previous Years		Quarters					Graphs	(past) Performance & (future) Improvement Statements
	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Q1 2017/18		
	Value	Value	Value	Value	Value	Value	Target		
HH04 Non-compliance ("Serious" audit comments) with Audit regimes - CAA, FSA, MCA	0	0	0	0	0	0	0		Performance: Achieving no major non-conformities at audit demonstrates good management practice and systems Improvement: Management systems are in place to ensure our service meet the compliance standards for our external auditors
SP-HS-022 Tonnes of CO2 from council operations	29,404	26,961	6,428	7,192	6,991	6,696	6,249		Performance: The Council has a statutory duty to reduce CO2 (Quarterly) Improvement: Action plan to reduce CO2 is being developed and implemented
HN04 Amount of household waste collected (tonnes)	10,326	10,378	2,857	2,508	2,253	2,700	2,760		Performance: Reduced workforce at Gas Plant reducing waste collected. Improvement: New vehicles have reduced breakdown down time making service more efficient

	Previous Years		Quarters						
Code & Short Name	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value	Target		
HN05 Percentage of household Waste recycled	9.7%	10.23%	9.7%	11.2%	8.3%	8.9%	10.5%		Performance: Public making better use of bring sites in particular textile banks. Improvement: Continue to encourage public to make better use of bring sites.
OPI-4C-H Sick %age - Infrastructure Directorate	3.8%	2.4%	2.2%	2.4%	2.7%	2.8%	4.0%		Performance: Improvement in sickness level for same period last year demonstrates management attention to absence and return to work discussions. Improvement: The department continues to apply the Council's "Promoting Attendance" policy and procedures to ensure that absences are minimised.
OPI-4E-H Overtime Hours - Infrastructure Directorate	77,950	74,814	18,281	20,089	17,845	22,446			Performance: Overtime levels support seasonal nature of work and there is also a reliance on overtime to deliver core services, due to recruitment problems in some areas. Improvement: Overtime is always done as a best-value option after consideration of alternatives, the workforce planning exercise will help minimise reliance on overtime in the future.

	Previous Years		Quarters						
Code & Short Name	2015/16	2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value	Target		
OPI-4G-H Employee Miles Claimed - Infrastructure Directorate	180,162	184,812	46,345	46,142	43,067	45,011			Performance: As work can be seasonal and responsive variation in miles claimed is to be expected. Improvement: The Council's carbon management plan is promoting green transport, reducing travel and using electric vehicles to reduce the impact of services on the environment.
H01 FOISA responded to within 20 day limit - Infrastructure Services	96.25%	98%	100%	92%	100%	100%	95%		Performance: FOISA response rate within Directorate is excellent and above Council average. Improvement: Aim to have more information made public so there is less need for the public to make FOI requests.

Appendix B (cont) - Sickness Absences - All Directorates (for comparison)

NOTE: Sickness absences are very seasonal, therefore this quarter is compared to the same quarter last year (rather than compared to the previous quarter).

Generated on: 17 August 2017

Short Name	Previous Years				Last year	This year
	2013/14	2014/15	2015/16	2016/17	Q1 2016/17	Q1 2017/18
	Value	Value	Value	Value	Value	Value
Sickness Percentage - Whole Council	3.6%	4.2%	3.7%	3.1%	2.6%	3.8%
Sick %age - Chief Executive's "Directorate"	1.4%	2.4%	3.6%	1.2%	0.5%	1.1%
Sick %age - Children's Services Directorate	2.8%	3.7%	2.9%	2.5%	2.3%	3.1%
Sick %age - Community Health & Social Care Directorate	6.0%	6.0%	5.6%	5.2%	4.1%	7.2%
Sick %age - Corporate Services Directorate	1.6%	2.4%	1.8%	1.9%	0.8%	2.1%
Sick %age - Development Directorate	2.7%	4.2%	3.5%	3.0%	2.2%	2.1%
Sick %age - Infrastructure Directorate	3.4%	4.0%	3.8%	2.4%	2.5%	2.8%

Appendix C - Complaints - Infrastructure Directorate

This shows all complaints that were open during the Quarter.

Frontline complaints should be closed within 5 working days

Investigations should be closed within 20 working days

Generated on: 17 August 2017

Standard of service received

ID	Stage Title	Received Date	Status	Closed Date	Service/Directorate	Days Elapsed	Complaint Upheld?
COM-17/18-633	Frontline	23-May-2017	Closed	04-Aug-2017	Roads	53	Partially Upheld

Dissatisfaction with Council policy

ID	Stage Title	Received Date	Status	Closed Date	Service/Directorate	Days Elapsed	Complaint Upheld?
COM-17/18-608	Frontline	03-Apr-2017	Closed	05-Apr-2017	Environmental Services	3	Partially Upheld
COM-17/18-623	Frontline	11-Apr-2017	Closed	18-Apr-2017	Environmental Health & Trading Standards	5	Not Upheld

CMP Energy / Emissions Report

1. Introduction

This report provides an update on the Council's position in terms of energy and carbon reduction.

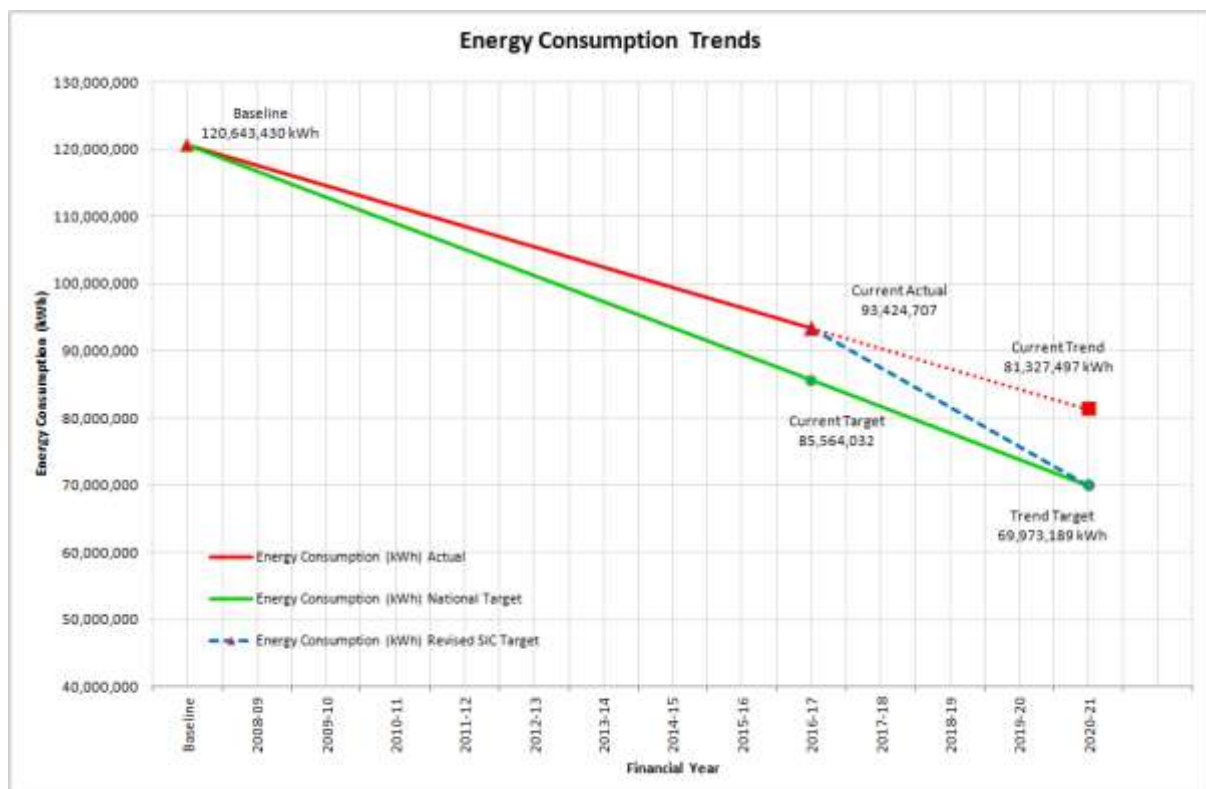
The report provides an update of the data presented in the Carbon Management Plan 2015-2020.

The separate highlights report outlines the achievements in 2016/17 as well as the ongoing work.

2. Trends

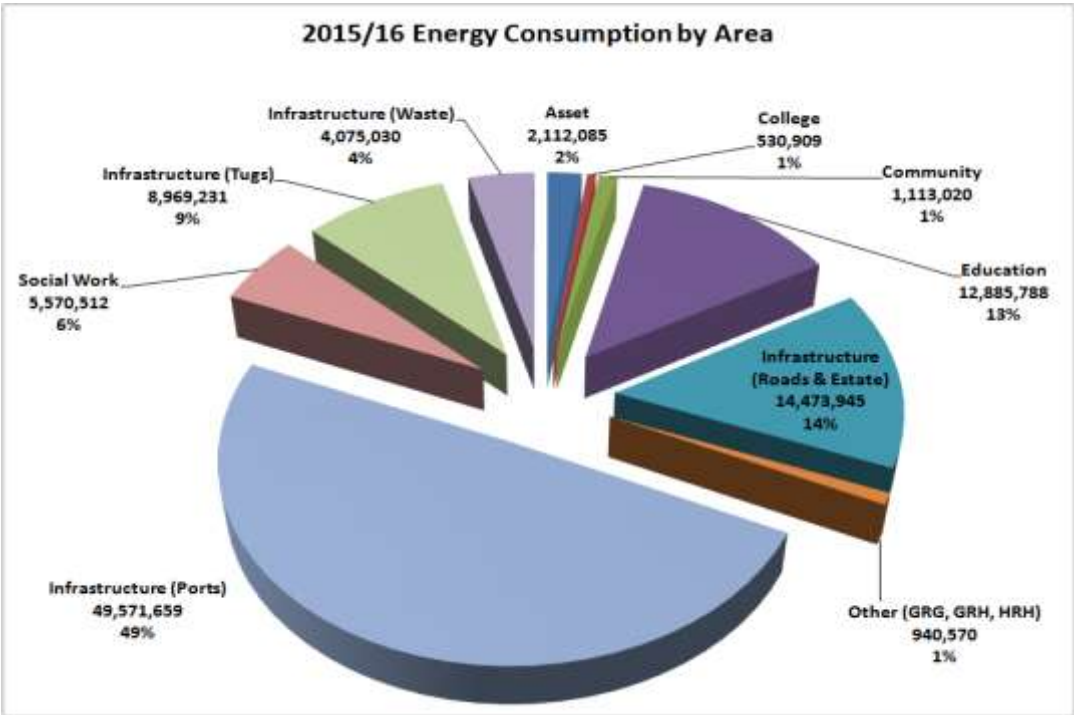
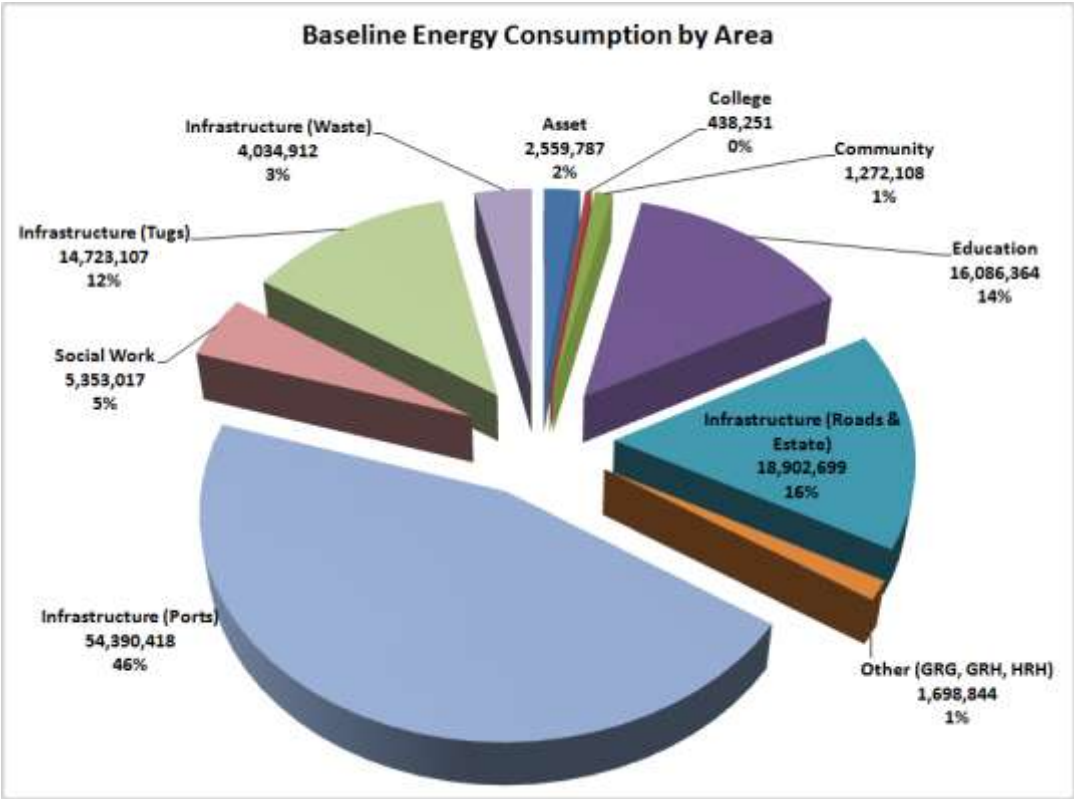
The following graph presents the consumption trend compared with the 42% reduction target (from the baseline) set for 2020/21.

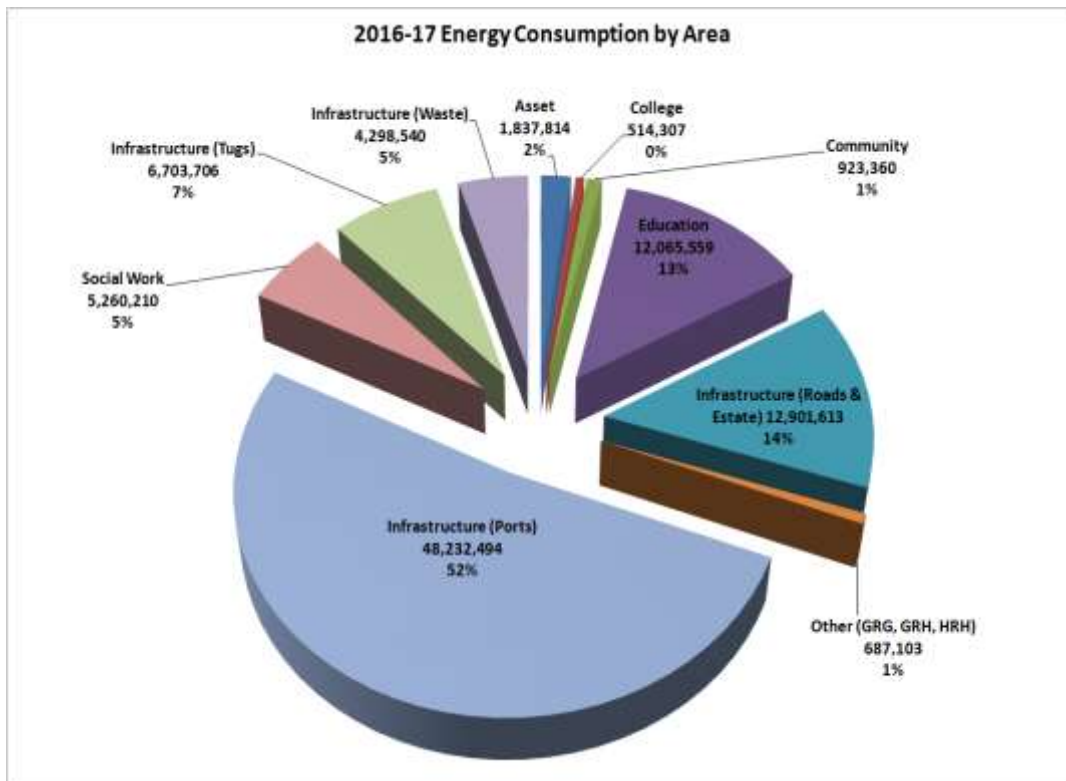
Whilst there is still a significant difference between target trend and current trend the current trend has decreased to a 2020/21 consumption of 81,327,497kWh, at current projections, from the 2015/16 figure of 88,227,818kWh.



3. Baseline, 2015/16 and 2016/17 Consumption Breakdown

The following graphs provide a comparison of the above three periods.





Taking each area individually:

Infrastructure Ports – this is the largest area of energy use (the majority of which is gas oil use on ferries). Other usage in this area includes piers/ferry terminals and navigation as well as the Sellaness site.

Social Work – this is mainly energy consumption in care homes and consumption reduction was impacted on through the Support Services facility at Montfield coming into Council usage in 2010. However 2016/17 did see a fall in consumption.

Infrastructure Tugs - consumption reduced dramatically as a result of efficiency savings through the installation of shore power and has further reduced significantly in 2016/17 due to the sale of two of the vessels.

Infrastructure Waste – consists mainly of consumption at the Energy Recovery Plant but includes the Waste Handling Facility and Rova Head. Consumption increased in 2016/17.

Asset – this area covers mainly office buildings and is showing a decrease in consumption mainly through Asset management and the sale/lease of a number of sites.

College – this is purely consumption at the Shetland College and shows an increase on the baseline mainly due to the extension that now connects the two buildings although consumption did reduce by a small amount in 2016/17.

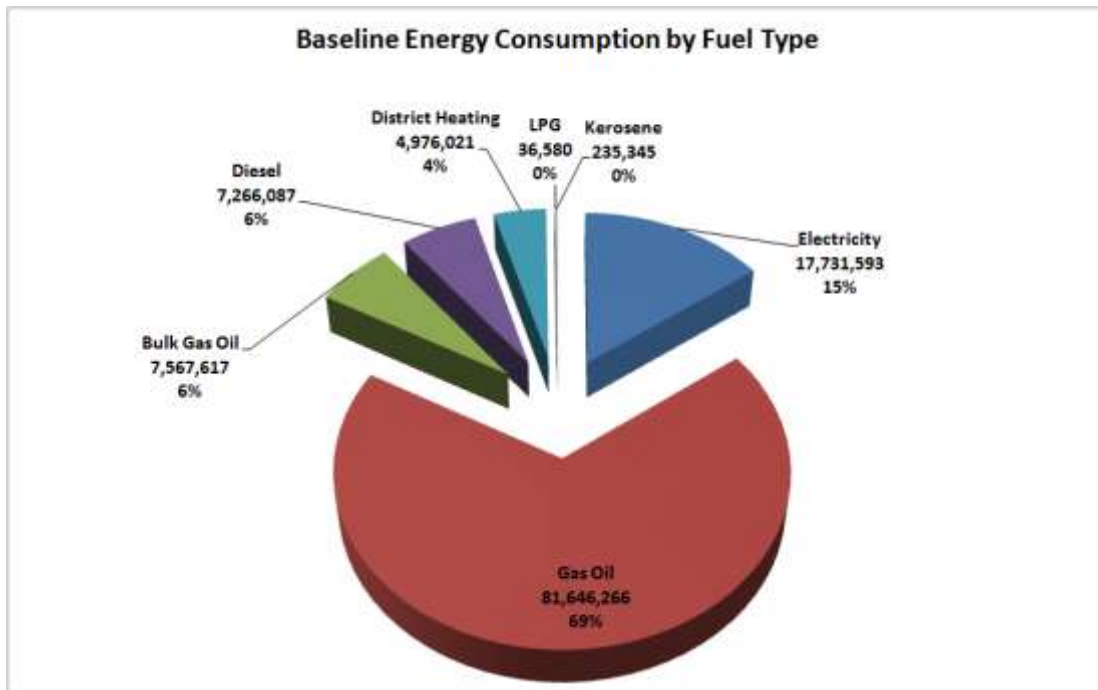
Community – includes the Islesburgh complex and the pavilions etc and shows a significant decrease in consumption in 2016/17.

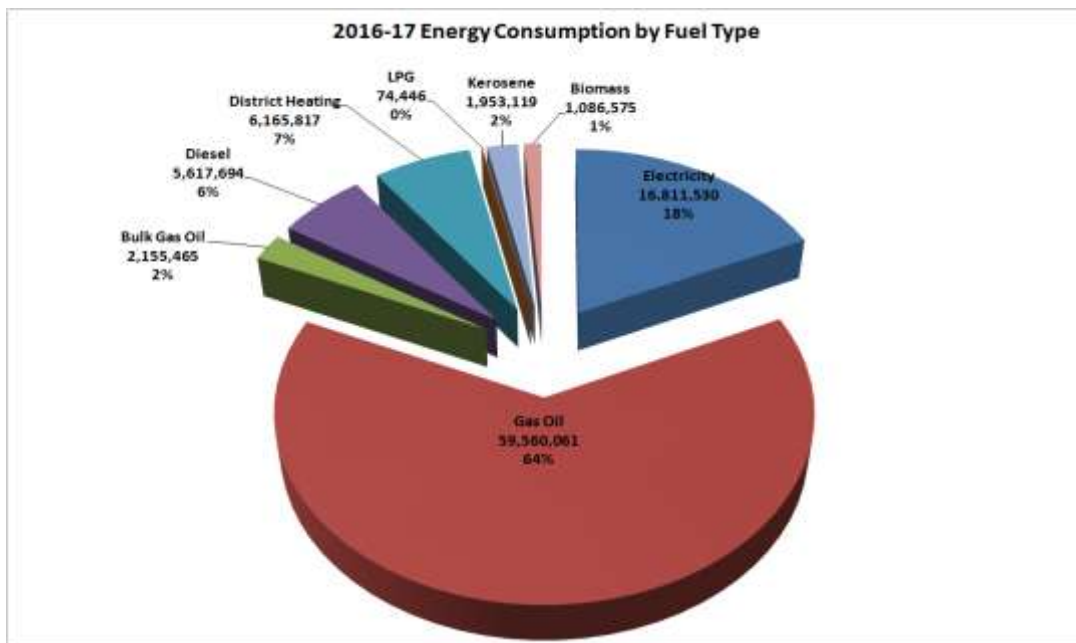
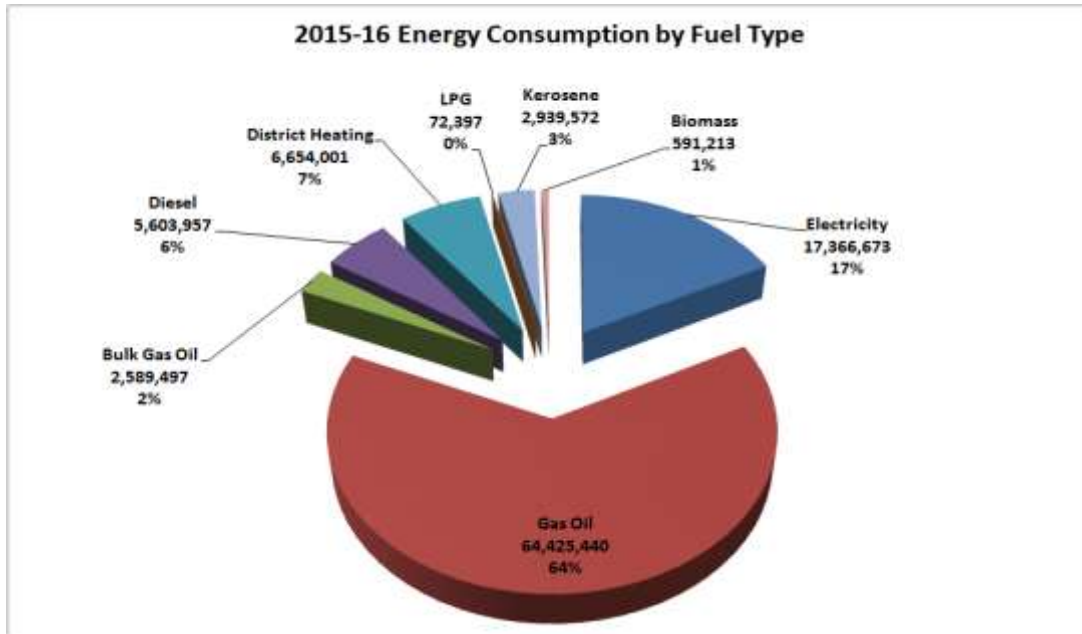
Education – this covers all schools as well as the Library and energy use has reduced significantly from the baseline to 2016/17.

Infrastructure (Roads and Estate) – this covers all bulk gas oil and diesel consumption (although fuel consumption is spread across a number of Services), street lighting, Scord Quarry as well as the various depots and workshops. There has been a significant reduction mainly through reductions in bulk fuel consumption; also the output at Scord Quarry (kerosene use) reduced from the high output period experienced in 2015/16 as a result of the construction work at Total.

Other (GRG, GRH, HRH) – again there has been a significant reduction in this area through the removal of central boiler plant for sheltered housing blocks.

4. Baseline, 2015/16 and 2016/17 Fuel Type Breakdown





Reviewing the fuel types in turn:

Gas Oil - significant reduction through the following:

- The tug shore power facility
- The sale of two of the tugs
- The reduction in bulk gas oil use (see final bullet point)
- The reduction generally in buildings through efficiency programmes and conversions to alternative fuels
- Conversion of sheltered housing OPD blocks from centralised boiler plant to houses with individual heating systems
- Asset management; and

- The conversion of Scord boiler plant to kerosene which explains the subsequent rise in kerosene use

Diesel - use has steadily reduced over the period through reduced mileage and efficiency programmes. The new tracking system may lead to further efficiency savings as well as the 5 new electric vehicles in use.

LPG – use has increased due to the gas boilers installed as part of refurbishment of the Shetland College catering facility.

Biomass - increased use through the operation of the Mid Yell scheme (supplying the school and leisure centre) and also replacement of oil boilers at Sellaness. The Scalloway Primary/leisure centre scheme is the main reason for the increase in biomass use in 2016/17 although the non-use of the old boilers has led to significant efficiency savings.

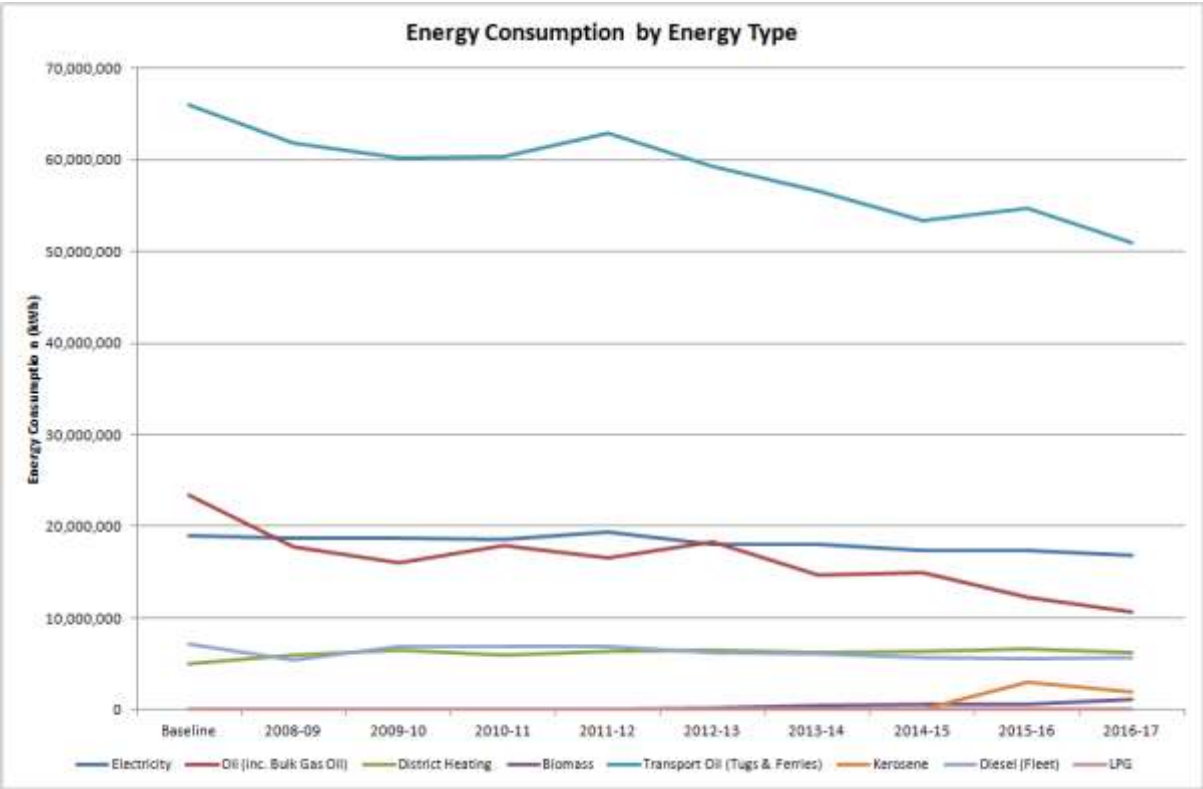
District Heating - increased use through decentralisation of the AHS (displacing remaining oil consumption). It is likely that there will be a large decrease in district heating use with the move to the new AHS although this is dependent on the future of the existing site.

Electricity – has reduced again 2016/17. Since the baseline years the rate of reduction has been impacted upon through the introduction of the shore power facility for the tugs which added over 1,000,000kWh of electricity usage (although this same facility achieved far higher reductions in oil use).

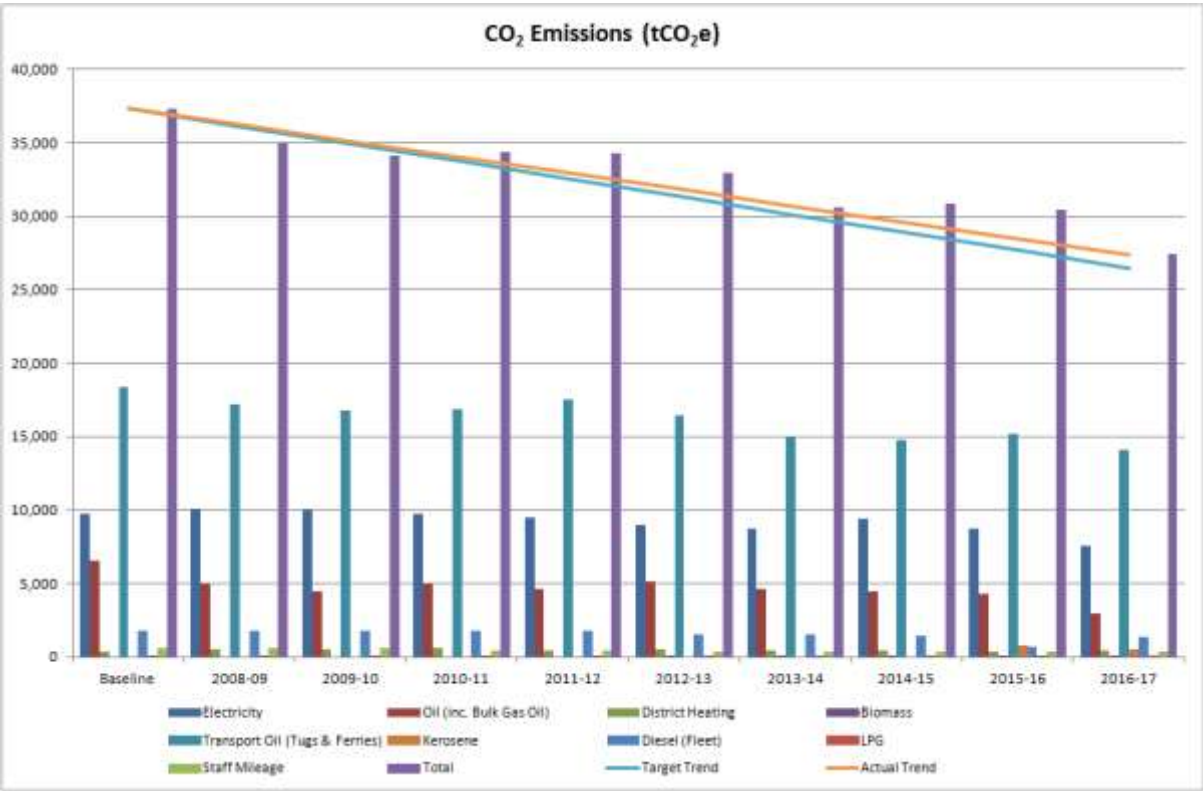
This is also the main area impacted on by external usage e.g. shore power at Scalloway and also the old Rova Head site which both have seen an increase in the last two years. Please note that all external usage is recharged.

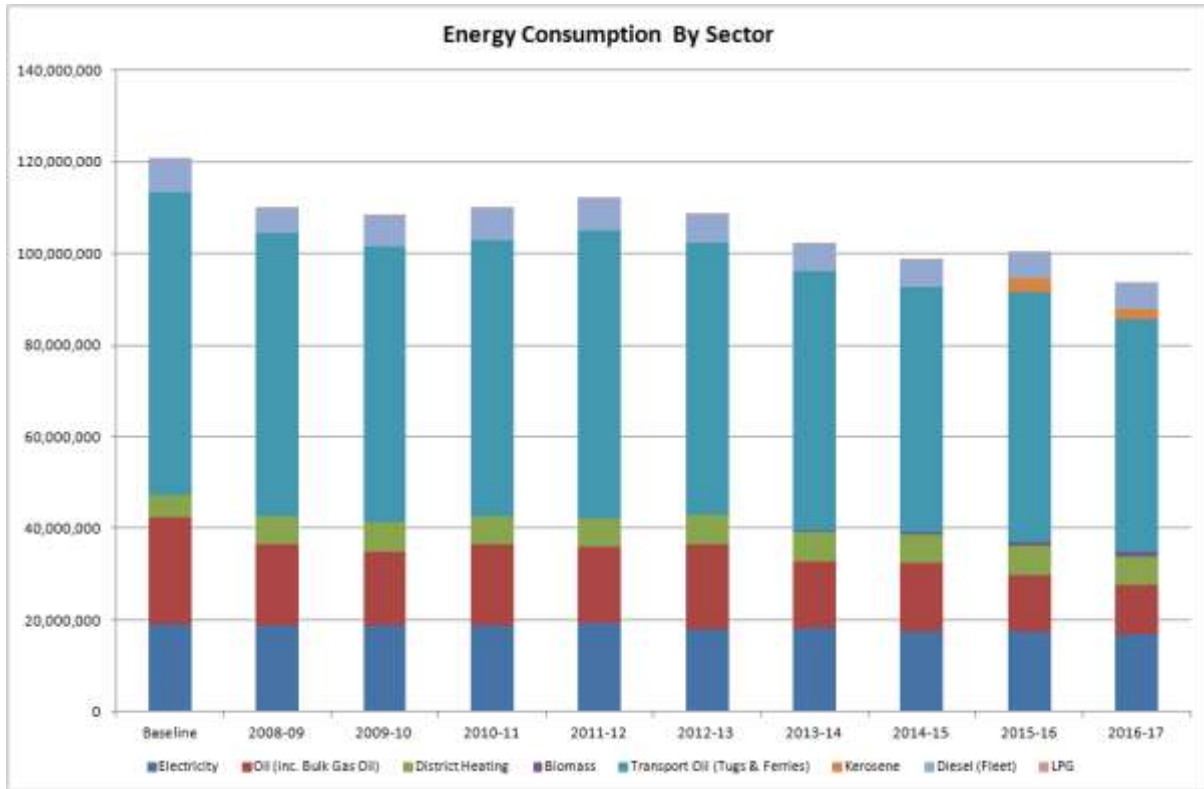
The % share of consumption has increased for electricity as greater reductions have been achieved in a number of the oil related consumption areas.

Space Heating - From 2015/16 to 2016/17 a decrease in energy used for space heating can partly be attributed to the warmer year in 2016/17 (measured in degree days).



5. Emissions Breakdown by Year





The two graphs show the impact that electricity has on emissions due to the higher emissions factor when compared with other fuels. In 2016/17 almost 30% of total emissions was due to electricity compared with a 17% share in consumption.

Referring to the consumption trends graph in section 2 please note that for **emissions** the reduction from the baseline to the 2016/17 is closer to 26% compared with an **energy** consumption reduction of approximately 23% and this difference is due to cleaner fuels generally (relative to previous years) and the use of alternative fuels.

Greenhouse Gas reductions through Animal Health

The GHGE (Greenhouse Gas Emissions) for 1000kg beef carcass from a healthy herd is estimated to be 17.1tCO₂e.

BVD

Before the BVD scheme was introduced, herd prevalence in Shetland was 13% (Edwin Moar). This figure will be used for our base line rate of herd prevalence. BVD is not present in any herds in the SAHS, so current level is 0%, a difference of 13%.

For a beef herd BVD can increase GHGE per unit of beef carcass by up to 130% (The Impact of Controlling Endemic Cattle Disease on Productivity, Performance and GHGs – Defra 2015)

Johne's

Johne's herd prevalence has decreased from 31.11% at the start of testing in 2009 to 13.01% in 2017. This is a decrease of 18.10%

For a beef herd Johne's can increase GHGE per unit of beef carcass by up to 40% (The Impact of Controlling Endemic Cattle Disease on Productivity, Performance and GHGs – Defra 2015)

Calculation

Healthy herd 17.1 tCO₂E

Disease	GHGE Increase	% affected herds	Disease GHGE	Increase GHGE
BVD	130.00%	13.00%	20.88	2.89
Johne's	40.00%	18.10%	18.34	1.24

Total GHGE Increase combined 4.13 tCO₂E

%age GHGE Increase combined 24%

Therefore the BVD and Johne's schemes combined lower GHGE by 4.13tCO₂E per 1000kg beef carcass produced.

What is 5.02tCO₂E? <http://www.yousustain.com/footprint/howmuchco2?co2=4.13+tons>

Answer: 4.13 tons of CO₂ would be emitted by any of the following activities...

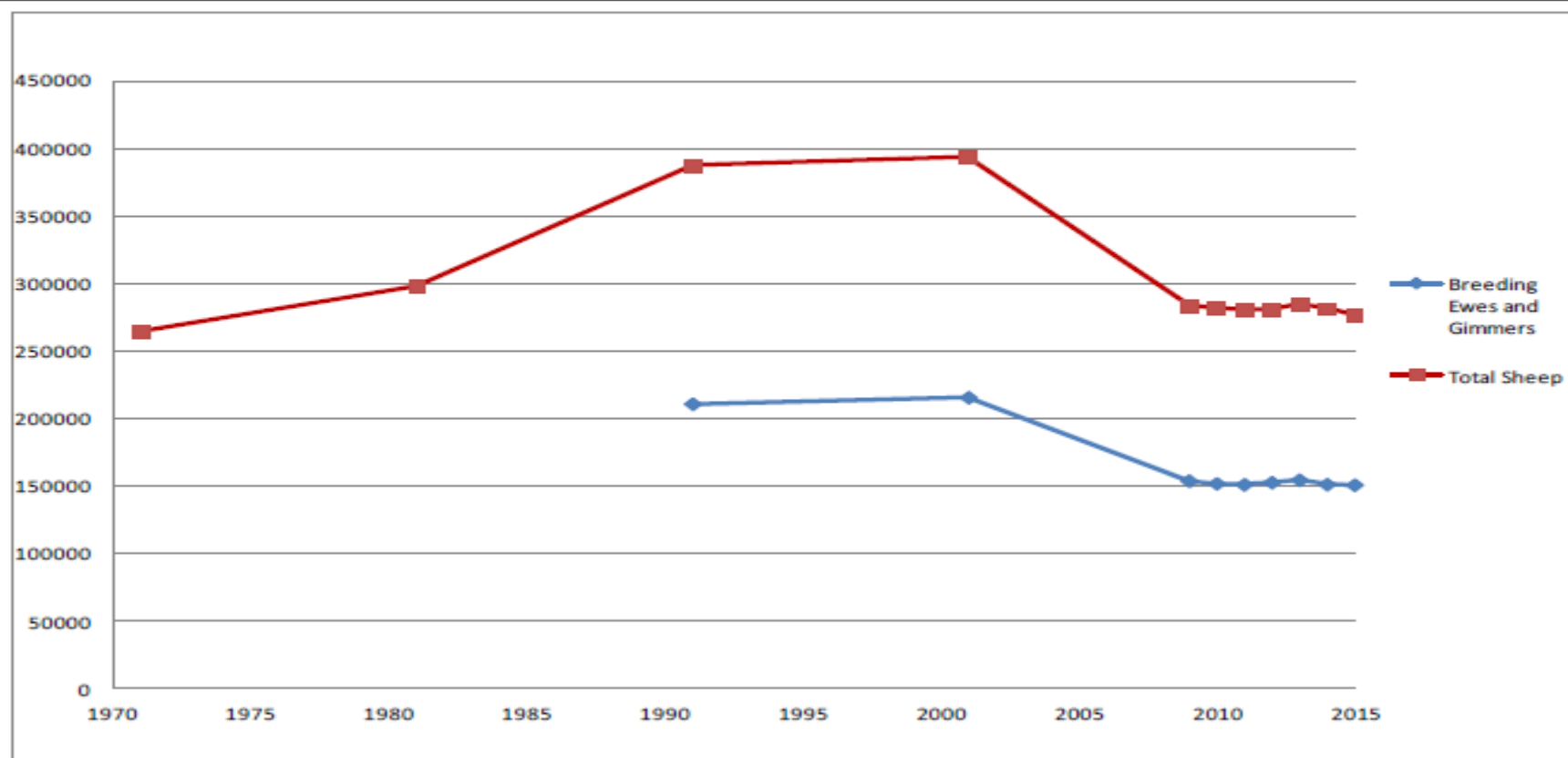
 <p>An average car could be driven for 6.69 days non-stop</p>	 <p>A 13-watt CF lightbulb could be lit for 36.27 years continuously</p>
 <p>A 747 could fly for 7.82 minutes non-stop</p>	 <p>A 42 inch LCD TV could be used for 2.82 years continuously</p>
 <p>The energy use of an average house could be met for 116 days</p>	 <p>Taking 0.8098 cars off the road for a year</p>

Sheep diseases

There currently isn't an equivalent quantitative study for sheep diseases.

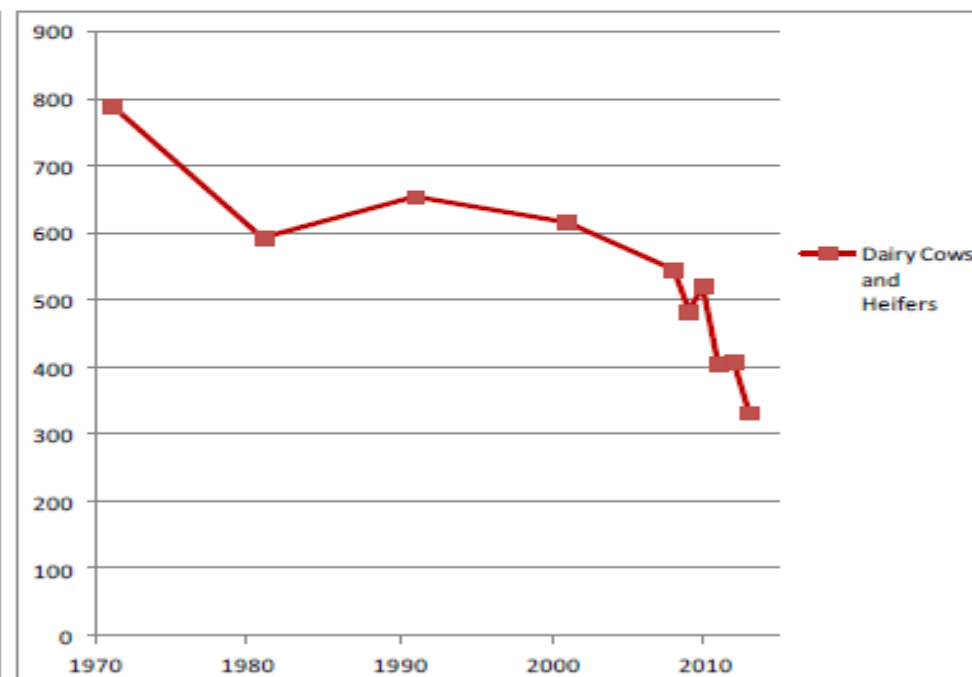
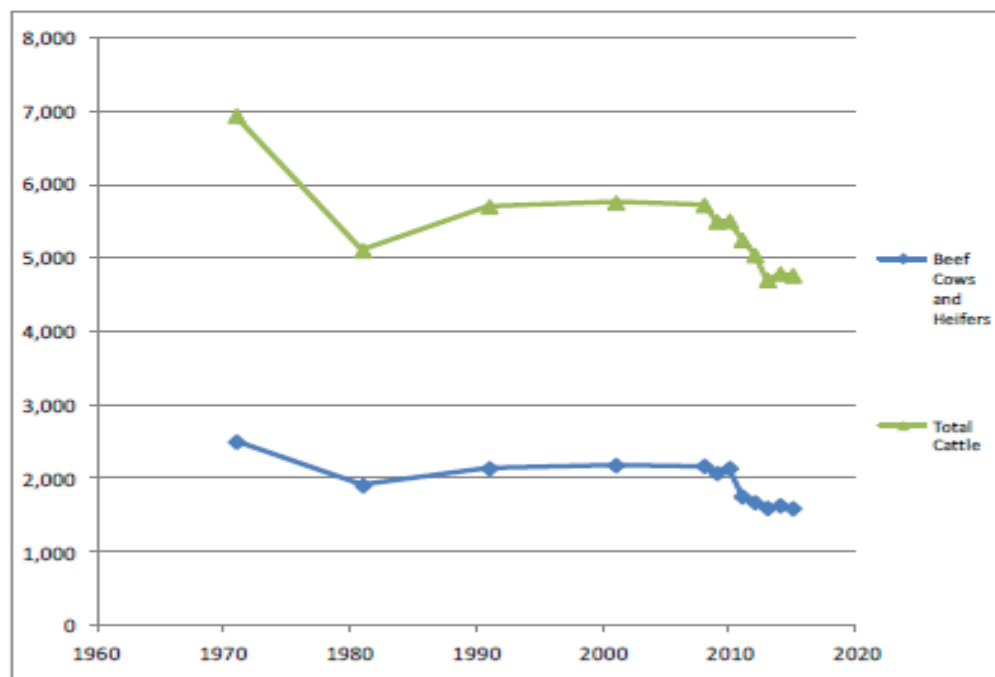
Numbers of sheep in Shetland (Shetland In Statistics / Scot Gov)

	1971	1981	1991	2001	2009	2010	2011	2012	2013	2014	2015
Breeding Ewes and Gimmers	n/a	n/a	210630	215480	153549	151560	150847	152444	154204	150919	150520
Total Sheep	264779	297558	387468	393686	283659	281644	280364	280793	285075	281145	276051



Numbers of cattle in Shetland (Shetland In Statistics / Scot Gov)

	1971	1981	1991	2001	2008	2009	2010	2011	2012	2013	2014	2015
Beef Cows and Heifers	2,492	1,896	2,129	2,172	2,161	2,066	2,131	1,746	1,666	1,588	1,624	1,584
Dairy Cows and Heifers	791	593	655	617	546	484	522	406	410	333	-	-
Total Cattle	6,945	5,103	5,701	5,756	5,723	5,498	5,507	5,245	5,038	4,700	4,786	4,764



Risk Register - Infrastructure Services

Risk & Details	Likelihood	Current Impact	Risk Profile	Current and Planned Control Measures	Probability	Target Impact	Risk Profile	Responsible Officer
Category	Corporate							
Corporate Plan	F4. Our "20 By '20" - It Equipment & Systems							
ICT and phone links to Infrastructure Services at Gremista are provided via a fibre-optic link. ICT is responsible once it (the cable/ equipment etc) is inside the building, but no organisation appears to be responsible for the fibre externally. There is uncertainty about who is responsible for repair and where any damage should be reported if a fault becomes apparent. There is no routine inspection or planned maintenance of this asset. There is no call-out number for faults. Trigger : Damage to external fibre link, any fault affecting ICT or phone. Consequences : Potential loss of communications (phone and ICT), inability to organise prompt repair, no clarity over timescales for repair, can't communicate with customers. Delay and impact on services. Risk type : Contractual Liabilities Assumed/Imposed Reference - F0032	Possible	Significant	Medium	• Directors of Infrastructure to liaise with colleagues and identify plans and guidance for in the event of damage Director of Infrastructure and Director of Development to liaise and look into who is responsible for what, review any service / lease agreements, prepare fault guidance for in the event that the cable is damaged, in consultation with Director of Corporate Services. Information and arrangements to be shared with ICT.	Rare	Significant	Low	Maggie Sandison Infrastructure Services
Category	Directorate							
Corporate Plan	F1. Our "20 by '20" - Leadership & Management							
Infra delivers front line services across Shetland, employing 467 FTE delivering a range of heavy engineering and transport services, including ferries. Trigger : Poorly managed systems, staff error, oversight or actions poor training of staff equipment or facilities not maintained lack of budget for maintenance of assets Consequences : injury or death, regulator (e.g. HSE, CAA or MCA) investigation time andf costs, legal action, reputational damage fines, prison- corporate manslaughter Risk type : Accidents /Injuries - Staff/Pupils/ Clients/Others Reference - F0021	Likely	Major	High	• Systems in place e.g. Risk Assessments, staff trained and competent to deliver duties. Managers trained in Health & Safety.PIN forms reviewed regularly. Safety culture to flag concerns.	Unlikely	Significant	Medium	Maggie Sandison Infrastructure Services

<p>Pollution incident at Port, Landfill/Waste to Energy Plant/ Airport</p> <p>Trigger : Poor staff training and supervision, failure of systems, failure of equipment, poor maintenance of equipment, staff actions,</p> <p>Consequences : Legal action, death/injury to plants/animals/humans, Prosecution</p> <p>Risk type : Escape of pollutant</p> <p>Reference - F0022</p>	Possible	Extreme	High	<p>• Management systems in place, regular audit, staff trained and competent, maintenance plans in place.</p>	Unlikely	Extreme	High	Maggie Sandison Infrastructure Services
<p>Failure to deliver a statutory duty or comply with legislation</p> <p>Trigger : Poor training, unqualified staff, poor supervision,</p> <p>Consequences : Prosecution, contracts fail due to failure to follow EU legislation, Legal action, Financial costs, failure to meet requirements for external auditors, reputational damage, political embarrassment,</p> <p>Risk type : Breach of Legislation - Data Protection, Human Rights, Employment Practice, Health and Safety etc</p> <p>Reference - F0023</p>	Possible	Significant	Medium	<p>• Policies and procedures applied to ensure compliance. Effective risk assessments with suitable control measures. Staff trained and suitably experienced and competent to fulfill duties.</p>				Maggie Sandison Infrastructure Services
<p>Loss of key staff, failure to recruit to key roles (Airport/Harbour/Ferries/Roads/Estates) means service cannot continue.</p> <p>Trigger : Recruitment by other industries</p> <p>age profile of staff</p> <p>no workforce planning</p> <p>recruitment and retention issues</p> <p>Consequences : Services stop</p> <p>financial loss at port</p> <p>impact on community</p> <p>reputational damage</p> <p>Risk type : Key staff - loss of</p> <p>Reference - F0024</p>	Likely	Significant	High	<p>• Workforce planning undertaken, key roles identified and training plans to build resilience. Career grades developed.</p>	Unlikely	Significant	Medium	Maggie Sandison Infrastructure Services
<p>Budget target is not delivered due to loss of income, uncontrolled spending or failure to deliver savings</p> <p>Trigger : Poor budget management, optimism about savings and change, unexpected demands on budget, loss of income or key customer,</p> <p>Consequences : Financial sustainability of Council impacted, reputational and political damage</p> <p>Risk type : Loss of revenue/income</p> <p>Reference - F0025</p>	Possible	Significant	Medium	<p>• Contingency Budget built into budget setting, regular budget monitoring to establish and respond to trends. Management trained and regular communications to staff.</p>	Unlikely	Significant	Medium	Maggie Sandison Infrastructure Services

Failure to plan for the future investment required in infrastructure replacement, repairs or maintenance Trigger : Poor financial planning failure to reduce estate Failure to invest in maintenance of roads, transport infrastructure Consequences : Withdrawal of key transport services, closure of roads, communities unable to access work, health, closure of offices and schools Risk type : Policies - effect of Reference - F0028	Likely	Significant	High	• Developing maintenance programe, long term financial plan, Asset/Investment Plan - contingency budgets for breakdowns.	Possible	Significant	Medium	Maggie Sandison Infrastructure Services	
Infrastructure regularly procures various significant, expensive items and must follow standing orders and EU procurement rules. Trigger : Lack of resources/ staff training, poor communication with corporate centre, emergency procurement, limited availability of local suppliers, obsolesence Consequences : Failure to demonstrate best value, breach of standing orders, scrutiny of external auditors, breach of EU legislation, negative PR/ media covertage, potential costs e.g. penalties for invalid contract Risk type : Procurement policy - failure to observe Reference - F0029	Rare	Significant	Low	• ReportingRegular reporting in place •Procurement ProcessesEnsure procurement rules, standing orders are complied with and refer to Part E Contract Standing Orders (Jan 2014 - Version 0.16) Wherever possible use ScotExcel suite of contracts or another approved framework arrangement.	Rare	Minor	Low	Maggie Sandison Infrastructure Services	
Corporate PlanF3. Our "20 By '20" - Shetlands "Voice"									
Changes in legislation for Fuel, waste, Carbon. technological change. Trigger : Consequences : Risk type : Legislation changes Reference - F0030	Significant	Possible	Significant	Medium	• Contingency plans in place, Island proofing under OUR ISLANDS OUR FUTURE, effective lobbying via COSLA and professional groups	Possible	Significant	Medium	Maggie Sandison Infrastructure Services
Corporate PlanF5. Our "20 by '20" - Standards of Governance									
Extreme weather events cause flooding, costal erosion, loss of key infrstructure lost sailings, increased snow conditions, additional repairs Trigger : Severe weather, Consequences : Loss of service, environmental damage/ impact, damage to property, loss of communications, loss of key infrastructure, financial burden for repairs, reputational damage. Risk type : Storm, Flood, other weather related, burst pipes etc Reference - F0026	Likely	Major	High	• Contingency budget for weather events	Likely	Significant	High	Maggie Sandison Infrastructure Services	

<p>Service has to manage response to Animal or infectious disease outbreak , management of the response fails to prevent further damage to public health or animal health</p> <p>Trigger : Outbreak of disease poorly managed by service</p> <p>Consequences : reputational damage external investigation political scrutiny government/agency sanctions claims and legal action</p> <p>Risk type : Publicity - bad</p> <p>Reference - F0027</p>	Unlikely	Extreme	High	<p>• Emergency plans exercisedstaff well trained and supported by progressional groups and agencies. Communication plans in place for emergencies.</p>	Rare	Significant	Low	<p>Maggie Sandison Infrastructure Services</p>
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Shetland Islands Council

Agenda Item

2

Meeting(s):	Development Committee Environment and Transport Committee Shetland College Board	28 August 2017 28 August 2017 30 August 2017
Report Title:	Development Services Directorate Performance Report – 3 Month/1st Quarter 2017/18	
Reference Number:	DV-41-17-F	
Author / Job Title:	Neil Grant - Director of Development Services	

1.0 Decisions/Action Required:

- 1.1 The Committee/Board should discuss the contents of this report as appropriate to their remit and make any relevant comments on progress against priorities to inform further activity within the remainder of this year, and the planning process for next and future years.

2.0 High Level Summary:

- 2.1 Highlights of progress against Council priorities from the Council's Corporate Plan by the Development Services Directorate are set out in Appendix 1. The Annual Investment report will be presented to the Development Committee next cycle. Further detail on Actions, Indicators and Risks are contained in appendices to this report.
- 2.2 The Committee/Board is invited to comment on any issues which they see as significant to sustaining and improving service delivery.

3.0 Corporate Priorities and Joint Working:

- 3.1 The Council's Corporate Priorities are set out in "Our Plan". This report reviews progress against these.

4.0 Key Issues:

- 4.1 The three priority outcomes identified in Our Plan, which the Development Directorate leads on are:

- Increasing Supply of Housing of all Tenures in Shetland
- Improve High Speed Broadband and Mobile Coverage
- Improve Transport Connections Internally and Externally

Progress in achieving outcomes in these areas are noted in the attached appendices.

<p>4.2</p> <p>4.3</p> <p>4.4</p>	<p>The Directorate has been leading a public engagement process focusing on ‘the place we live’, and its effects on our wellbeing, thus the Place Standard engagement which will feed into Local Housing Strategy, Local Development Plan, Local Transport Strategy and Local Outcomes Improvement Plan in the coming year.</p> <p>We are also progressing a plan along with other community partners to increase the number of young people in Shetland, attracting young people to study is a key part of that being the “10 Year Plan to Attract People to Live, Study, Work and Invest in Shetland.”</p> <p>Engagement with the Scottish Government and Transport Scotland on Specification and Fair Funding of Inter-Island Transport continues to be a priority, and dialogue is continuing with Scottish Government at a political level regarding funding for 2017/18.</p>
5.0 Exempt and/or Confidential Information:	
<p>5.1</p>	<p>None.</p>
6.0 Implications :	
<p>6.1</p> <p>Service Users, Patients and Communities:</p>	<p>Effective performance management and continuous improvement are important duties for all statutory and voluntary sector partners in maintaining appropriate services for the public. The Development Directorate has been leading a public engagement process using the Place Standard tool to gather the views of communities on aspects of the place they live in, which will be used as an evidence base for strategic planning, and will also feed into the Locality Profiles.</p>
<p>6.2</p> <p>Human Resources and Organisational Development:</p>	<p>Recruitment of professional staff particularly in Planning Services remains challenging.</p> <p>Workforce development, attracting people to live work and study in Shetland and skills development plans are noted in the appendices to this report.</p>
<p>6.3</p> <p>Equality, Diversity and Human Rights:</p>	<p>The Development Service, through Community Planning and Development, has a role in supporting all Council services and partner organisations to promote Equalities, Diversity and Human Rights, as well as ensuring the Government’s drive to reduce inequalities is forefront in service planning and delivery. There are some recent examples of best practice within the Service; for example, the ZetTrans pilot which has enabled at least 7 people to move into employment, without cost to any public service. All projects within the Development Service are monitored and assessed to understand and ensure negative impacts are mitigated and positive impacts are optimised.</p>

6.4 Legal:	There are a number of projects and key actions within the Performance Report that have legal implications. Legal advice will be sought as matters progress to ensure that Shetland Islands Council complies with all statutory requirements.	
6.5 Finance:	There are no direct financial implications arising from this report. The actions, measures and risk management described in this report are projected to be delivered within existing approved budgets, further details of the projected outturn position are detailed in the Quarter 1 Management Accounts reports for Development Committee, Environment & Transport Committee and Shetland College Board, also presented this cycle.”	
6.6 Assets and Property:	The Business Case for the Council investing further in broadband infrastructure is noted in this report.	
6.7 ICT and new technologies:	None.	
6.8 Environmental:	None.	
6.9 Risk Management:	Embedding a culture of continuous improvement and customer focus are key aspects of the Council’s improvement activity. Effective performance management is an important component of that which requires the production and consideration of these reports. Failure to deliver and embed this increases the risk of the Council working inefficiently, failing to focus on customer needs and being subject to further negative external scrutiny.	
6.10 Policy and Delegated Authority:	<p>The Council’s Constitution – Part C - Scheme of Administration and Delegations provides in its terms of reference for Functional Committees (2.3.1 (2)) that they;</p> <p>“Monitor and review achievement of key outcomes in the Service Plans within their functional area by ensuring –</p> <ul style="list-style-type: none"> (a) Appropriate performance measures are in place, and to monitor the relevant Planning and Performance Management Framework. (b) Best value in the use of resources to achieve these key outcomes is met within a performance culture of continuous improvement and customer focus.” 	
6.11 Previously considered by:	N/A	

Contact Details:

Neil Grant, Director of Development Services

01595 744968, nrj.grant@shetland.gov.uk

18 August 2017

Appendices:

- Appendix A - Progress on the Directorate Projects and Actions (Development Committee, Environment and Transport Committee, Shetland College Board)
- Appendix B - Key Directorate Indicators and Council Wide Indicators (Development Committee, Environment and Transport Committee, Shetland College Board)
- Appendix C - Complaints Summary (Development Committee Only)
- Appendix D - Risk Register (Development Committee Only)
- Appendix E - Investment Fund (Development Committee Only)

Background Documents:

[Our Plan 2016-20](#)

[Development Directorate Plan 2017-20](#)

Appendix A - Projects and Actions - Development ->Environment & Transport Committee

Generated on: 17 August 2017

OUR PLAN 2016-2020

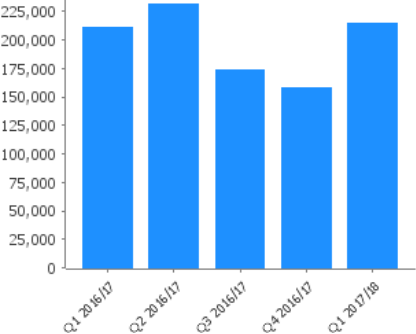
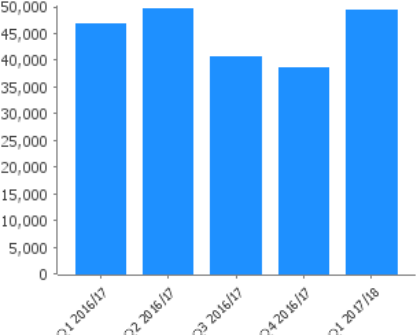
E) CONNECTION & ACCESS

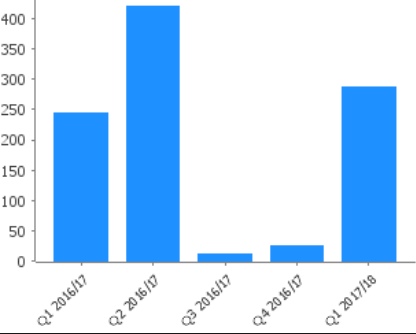
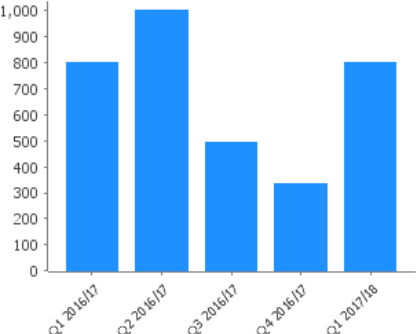
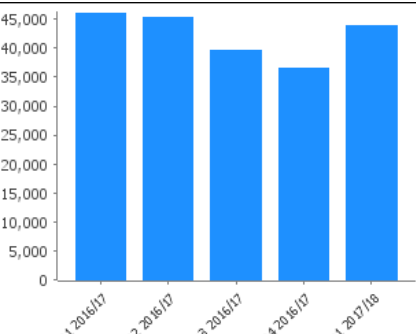
1) Community transport solutions There will be transport arrangements in place that meet people’s needs and that we can afford to maintain in the medium term.

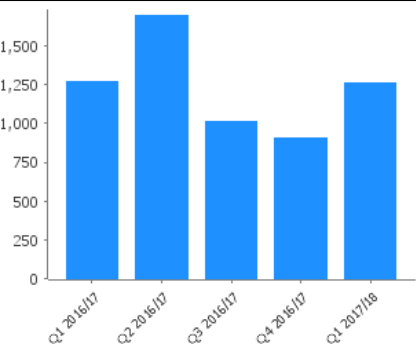
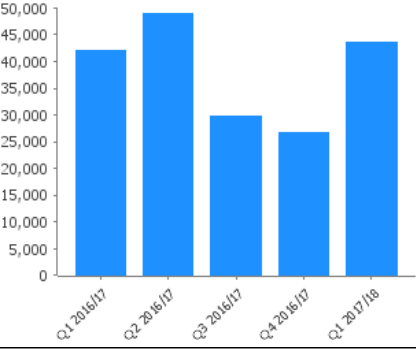
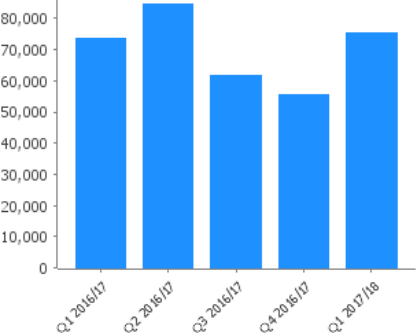
Code & Title	Description	Desired Outcome	Dates		Progress	Progress statement	Lead
DP205 Achieve sustainable and affordable internal and external transport links	Work with Scottish Government and Transport Scotland to achieve appropriate level of internal and external transport, and achieve fair funding for inter-island transport services, by 2017/2018.	Sustainable and affordable transport services	Planned Start	01-Apr-2017		Case for fare funding of internal ferries has been put to Scottish Government. Discussions are currently taking place at a political level with ministers. Business case analysis of internal air service options has commenced Consultation response has been provided to Scottish Government on procurement of external ferry services. Funding for smart ticketing pilot has been confirmed by Transport Scotland.	Development Services Directorate
			Actual Start	17-Aug-2017	<div><div>50%</div></div>		
			Original Due Date	01-Apr-2020	Expected success		
			Due Date	01-Apr-2020			
			Completed Date		Likely to meet or exceed target		

Appendix B Performance Indicators (Quarterly)- Development Directorate -> Environment & Transport Committee

Generated on: 17 August 2017

	Previous Year	Quarters						
Code & Short Name	2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value		
HF-TOT-P All Ferries Total - Passengers	773,998	210,384	231,780	173,440	158,394	214,815		Performance Q1 Carrying numbers across all routes are marginally up on 2016/17 Improvement Outline Business Cases for each route will be worked through, once Scottish Government fair funding position is resolved.
HF-BRE-P Bressay Service Total - Passengers	175,480	46,680	49,715	40,561	38,524	49,452		

	Previous Year	Quarters						
Code & Short Name	2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value		
HF-FRI-P Fair Isle Service Total - Passengers	703	245	421	11	26	287		
HF-PAP-P Papa Stour Service Total - Passengers	2,635	803	1,003	492	337	799		
HF-WHA-P Whalsay Service Total - Passengers	167,325	45,873	45,264	39,691	36,497	43,811		

	Previous Year	Quarters						
Code & Short Name	2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2017/18	Graphs	(past) Performance & (future) Improvement Statements
	Value	Value	Value	Value	Value	Value		
HF-SWM-P Skerries/Whalsay Skerries/Mainland total - Passengers	4,877	1,265	1,694	1,010	908	1,262		
HF-UYF-P Unst/Yell/Fetlar triangle Total - Passengers	147,465	41,980	48,993	29,836	26,656	43,705		
HF-YEL-P Yell/Mainland Service Total - Passengers	275,513	73,538	84,690	61,839	55,446	75,499		



Meeting(s):	Environment & Transport Committee	28 August 2017
Report Title:	Management Accounts for Environment & Transport Committee: 2017/18 – Projected Outturn at Quarter 1	
Reference Number:	F-068-F	
Author / Job Title:	Jonathan Belford, Executive Manager - Finance	

1.0 Decisions / Action required:

- 1.1 The Environment & Transport Committee RESOLVES to review the Management Accounts showing the projected outturn position at Quarter 1.

2.0 High Level Summary:

- 2.1 The purpose of this report is to enable the Environment & Transport Committee to monitor the financial performance of services within its remit to ensure that Members are aware of the forecast income and expenditure and the impact that this will have with regard to delivering the approved budget. This report shows the projected financial consequence of the service performance detailed in the Infrastructure and Development Directorates' performance reports, and allows the Committee the opportunity to provide early instruction to officers to address any forecast overspends in order that the budget is delivered by year-end.
- 2.2 On 15 February 2017 (SIC Min Ref: 7/17) the Council approved the 2017/18 revenue and capital budgets for the Council (including the General Fund, Harbour Account, Housing Revenue Account and Spend to Save) requiring a draw from reserves of £12.252m. It is vital to the economic wellbeing of the Council that the financial resources are managed effectively and expenditure and income is delivered in line with the budget, as any overspends will result in a further draw on reserves and would be evidence that the Council is living beyond its means.
- 2.3 This report forms part of the financial governance and stewardship framework which ensures that the financial position of the Council is acknowledged, understood and quantified on a regular basis. It provides assurance to the Corporate Management Team and the Committee that resources are being managed effectively and allows corrective action to be taken where necessary.
- 2.4 Since the approval of the 2017/18 budget, revisions to the budget have been incorporated for the Council's budget carry-forward scheme. Therefore this report refers to the revised budget that is now in place for each of the services.

3.0 Corporate Priorities and Joint Working:

- 3.1 There is a specific objective in the Corporate Plan that the Council will have excellent financial management arrangements to ensure that it continues to keep a

<p>balanced and sustainable budget, and is living within its means; and that the Council continues to pursue a range of measures which will enable effective and successful management of its finances over the medium to long term. This involves correct alignment of the Council's resources with its priorities and expected outcomes, and maintaining a strong and resilient balance sheet.</p>	
4.0	Key Issues:
4.1	This report presents the projected outturn position for 2017/18 as at the end of the first quarter for revenue and capital. The forecasts have been determined by Finance Services after consultation with the relevant budget responsible officers.
4.2	The projected revenue outturn position for the Environment & Transport Committee is a breakeven position, which means the services in this Committee area are collectively projected to spend in line with their approved budget. The projected outturn includes £45k of recurring savings.
4.3	The projected capital outturn position for the Environment & Transport Committee is an underspend of £600k in 2017/18, with a requirement for slippage of £600k to 2018/19, which means the services in this Committee area are collectively projected to spend in line with their Council approved budget.
4.4	The projected revenue outturn position of the collective Council budgets for energy, metered water, building maintenance, grasscutting and fleet maintenance are highlighted in this report for review by the Environment & Transport Committee. Although these budgets are dispersed throughout all service areas of the Council, including the Harbour Account and HRA, they are budgeted, monitored, and the outturn projected by the Estate Operations Service.
4.5	See appendices 1 and 2 attached for detailed information on the revenue and capital outturn positions.
4.6	Provision was made in the Council's 2017/18 Budget for cost pressures and contingencies. It is held centrally by the Executive Manager - Finance.
4.7	Cost pressures are recurring in nature and increase the base cost of the service being delivered, eg pay awards, whereas contingency items are deemed non-recurring and likely to vary year on year, eg ferry breakdown costs.
4.8	This approach assists the Council to mitigate any spending risks. However, it is expected that services will endeavour, in the first instance, to meet any additional costs from within existing resources.
4.9	An allocation of £183k has been applied to Ferry Operations to meet ferry vessel fuel costs, and £50k has been applied across Infrastructure Services and Transport Planning Service for holiday pay and pension increase costs from the cost pressure & contingency budget to date.
5.0	Exempt and/or confidential information:
5.1	None.
6.0	Implications :
6.1	Any implications in relation to the actions and service provision

Service Users, Patients and Communities:	in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.2 Human Resources and Organisational Development:	Any implications in relation to the actions and service provision in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.3 Equality, Diversity and Human Rights:	Any implications in relation to the actions and service provision in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.4 Legal:	Any implications in relation to the actions and service provision in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.5 Finance:	<p>The 2017/18 Council budget does not require a draw on reserves in excess of the returns that the fund managers can make on average in a year, and therefore demonstrates that the Council is living within its means. To achieve this, a one-off underspend from the 2016/17 budget has been used to balance the General Fund. This is a one-off solution for 2017/18.</p> <p>For every £1m of reserves spent in excess of a sustainable level will mean that the Council will have to make additional savings of £73k each year in the future as a result of not being able to invest that £1m with fund managers to make a return.</p> <p>It is therefore vital that the Council delivers its 2017/18 budget. This report demonstrates that the services under the remit of the Environment & Transport Committee are collectively projecting to spend in line with their Council approved budget.</p>
6.6 Assets and Property:	Any implications in relation to the actions and service provision in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.7 ICT and new technologies:	Any implications in relation to the actions and service provision in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.8 Environmental:	Any implications in relation to the actions and service provision in this report will be included in the Director of Infrastructure and Director of Development Performance Management reports also presented at this meeting.
6.9 Risk Management:	There are numerous risks involved in the delivery of services and the awareness of these risks is critical to successful financial management.

	<p>From a financial perspective, risks are an integral part of planning for the future, as assumptions are required to be made. These assumptions can be affected by many internal and external factors, such as supply and demand, which may have a detrimental financial impact.</p> <p>The most significant financial risk for services reporting to this Committee are ferry vessel and other major plant breakdown, mainly due to ageing infrastructure, resulting in substantial additional costs for remedial works.</p> <p>This report is part of the framework that provides assurance, or recognition of any deviation from the budget that may place the Council in a financially challenging position and requires remedial action.</p> <p>The Council makes provision within its budget for cost pressures and contingencies that may arise. This approach provides additional confidence for the Council to be able to mitigate any adverse financial circumstances.</p> <p>A strong balance sheet and the availability of usable reserves ensure that the Council is prepared for significant unforeseen events.</p> <p>Any draw on reserves beyond the Council's sustainable level would have an adverse impact on the level of returns from the Council's long-term investments. This situation would require to be addressed quickly to ensure no long term erosion of the investments.</p>	
6.10 Policy and Delegated Authority:	<p>Section 2.1.2(3) of the Council's Scheme of Administration and Delegations states that the Committee may exercise and perform all powers and duties of the Council in relation to any function, matter, service or undertaking delegated to it by the Council. The Council approved both revenue and capital budgets for the 2017/18 financial year. This report provides information to enable the Committee to ensure that the services within its remit are operating within the approved budgets.</p> <p>The Council's Financial Regulations state that the Executive Manager - Finance has a responsibility to ensure that detailed monitoring by Directors and Executive Managers is carried out and that the Council will determine the reporting content, timescale, frequency and receiving committee(s) required for monitoring statements and the Executive Manager - Finance will be responsible for ensuring compliance with this.</p>	
6.11 Previously considered by:	<i>n/a</i>	<i>n/a</i>

Contact Details:

Brenda Robb, Management Accountant, brenda.robbs@shetland.gov.uk, 11 Aug 2017

Appendices:

Appendix 1 – Environment & Transport Committee Projected Revenue Outturn Position for 2017/18

Appendix 2 – Environment & Transport Committee Projected Capital Outturn Position for 2017/18

Background Documents:

SIC Budget Book 2017/18, SIC 15 February 2017

<http://www.shetland.gov.uk/coins/submissiondocuments.asp?submissionid=20520>

Environment & Transport Committee

1. Projected Revenue Outturn Position 2017/18

Service	Revised Annual Budget at Quarter 1 (Adv)/Pos £000	Projected Outturn at Quarter 1 (Adv)/Pos £000	Budget v Projected Outturn Variance at Quarter 1 (Adv)/Pos £000
Director of Infrastructure Services	673	670	3
Environmental Services	2,140	2,099	41
Estate Operations	620	619	1
Ferry Operations	11,310	11,333	(23)
Roads Service	3,487	3,473	14
Transport Planning	6,029	6,074	(45)
Collective Council Budgets:			
Energy	2,838	2,843	(5)
Metered Water	324	324	0
Building Maintenance	2,364	2,357	7
Grasscutting	174	174	0
Fleet Maintenance	776	775	1
Less: Collective Council Budgets recharged to Harbour Account, HRA, Capital & VJB	(602)	(608)	6
Total Controllable Costs	30,133	30,133	0

An explanation of the significant projected outturn variances by service at quarter 1 are set out below.

1.1 Director of Infrastructure Services - projected outturn underspend of £3k (0.4%)

There are no significant variances in this service area.

1.2 Environmental Services – projected outturn underspend of £41k (2%)

There are no significant variances in this service area.

There is a recurring saving of £25k for the reduction in rates after the Assessor's 2017/18 valuation review.

1.3 Estate Operations – projected outturn underspend of £1k (0.2%)

There are no significant variances in this service area.

1.4 Ferry Operations – projected outturn overspend of (£23k) (0.2%)

There are no significant variances in this service area.

The outturn position includes a contingency allocation of £183k, which has been added to Ferry Operations' budgets for the increased cost of ferry fuel.

1.5 Roads Service – projected outturn underspend of £14k (0.4%)

There are no significant variances in this service area.

There is a recurring saving of £20k for the reduction in fuel costs following the implementation of vehicle telematics to the Roads' fleet.

1.6 Transport Planning - projected outturn overspend (£45k) (0.7%)

The main reason for this projected overspend is increased requirement for school transport, including home to school transport, transport to recreational facilities and the provision of taxi services for vulnerable individuals (£85k).

1.7 Energy - projected outturn overspend of (£5k) (0.2%)

There are no significant variances in this service area.

1.8 Metered Water - projected outturn breakeven

There are no significant variances in this service area.

1.9 Building Maintenance - projected outturn underspend £7k (0.3%)

There are no significant variances in this service area.

1.10 Grasscutting - projected outturn breakeven

There are no significant variances in this service area.

1.11 Fleet Management Unit - projected outturn underspend £1k (0.1%)

There are no significant variances in this service area.

Environment & Transport Committee

2. Projected Capital Outturn Position 2017/18

Service	Revised Annual Budget at Quarter 1 (Adv)/Pos £000	Projected Outturn at Quarter 1 (Adv)/Pos £000	Budget v Projected Outturn Variance at Quarter 1 (Adv)/ Pos £000	Slippage Required in 2018/19 £000	Overall Budget v Projected Outturn Variance at Quarter 1 (Adv)/Pos £000
Environmental Services	181	181	0	0	0
Estate Operations	2,504	2,504	0	0	0
Ferry Operations	1,224	624	600	(600)	0
Roads Service	1,895	1,895	0	0	0
Total Controllable Costs	5,804	5,204	600	(600)	0

The projected outturn variance figures at quarter 1 are included above for reference. An explanation for the significant variances by service is set out below:

2.1 Environmental Services - projected outturn breakeven

There are no significant variances in this service area.

2.2 Estate Operations - projected outturn breakeven

There are no significant variances in this service area.

2.3 Ferry Operations - projected outturn underspend £600k (49%)

The projected underspend relates to steel works for the Leirna life extension which will not be completed this year. There is no capacity for these works in 2017/18 due to the annual drydocking schedule and slippage of Fivla life extension works from 2016/17.

Slippage

There will be project slippage of £600k to 2018/19 for Leirna life extension works.

2.4 Roads Service - projected outturn breakeven

There are no significant variances in this service area.



Meeting(s):	Environment & Transport Committee	28 August 2017
Report Title:	Implementation of Kerbside Recycling Collection Service	
Reference Number:	ES-02-17-F	
Author / Job Title:	Colin Bragg / Team Leader – Waste Management	

1.0 Decisions / Action required:

- 1.1 That the Environment and Transport Committee consider the implementation of kerbside recycling in Shetland in accordance with the Scottish Government and COSLA - Charter for Household Recycling to meet the Council's duty to recycle and sort waste prior to incineration.
- 1.2 That the Committee approve the timetable and strategy for implementation in accordance with the Charter for Household Recycling - Code of Practice (CoP) and the dates as agreed with Zero Waste Scotland (ZWS). As set out in Sections 2.6 and 2.7 of this report.
- 1.3 That the Committee approves acceptance of the offer of ZWS transitional funding set out in paragraph 4.1.4 of this report.
- 1.4 That the Committee approve plans for a Business Justification Case for this project through the Council's Gateway Process for the Management of Capital Projects.

2.0 High Level Summary:

- 2.1 This report presents a plan for the implementation of kerbside recycling collections for every household in Shetland. This proposal adheres to the Scottish Government Household Recycling Charter and its Code of Practice (CoP).
- 2.2 In 2015 the Scottish Government and COSLA launched the Charter for Household Recycling and approved a Code of Practice for the collection of waste for the whole of Scotland. The aim of the new CoP is to ensure consistency of collection systems across Scotland to encourage greater participation in recycling schemes to increase the capture of resources from waste.
- 2.3 The Waste (Scotland) Regulations 2012 requires local authorities to provide a separate collection for Glass, Metal, Plastic, Cardboard, Paper and Food Waste. Food waste separation is not a requirement in remote rural areas. In addition the Regulations state that where practicable no waste, including non-ferrous metals or hard plastics, should be incinerated.
- 2.4 The current derogations that allow all of Shetland's household waste to be incinerated in the Energy Recovery Plant (ERP) will not be extended in future years, following a change to the SEPA PPC Permit at the ERP. This is fundamentally due to overriding environmental priorities and CO₂ reduction targets

in Scotland.

- 2.5 In October 2016, Shetland Islands Council (SIC) signed the Household Recycling Charter. The Charter is a declaration of the SIC's intent to provide services that deliver local and national benefits, encouraging high-levels of citizen participation in waste prevention, recycling and reuse.
- 2.6 A preferred recycling system for Shetland has been identified jointly by SIC and ZWS. Some transitional funding to assist the implementation of this service has been offered by ZWS.
- 2.6.1 Kerbside recycling collection of two streams (paper/card and plastic/cans/ cartons) would be implemented by 01 July 2018. ZWS funding will cover the cost of two receptacles for each household - as well as a funding for a communications strategy and SIC staff training.
- 2.6.2 Collection costs would not increase. Collection would, where possible, be at existing collection points and existing routes. Non-recyclable waste will be collected fortnightly from the usual collection location for each household.
- 2.6.2.1 Glass would continue to be collected at bring sites throughout Shetland. No kerbside collection would be provided. This is to ensure current operational costs are not exceeded. Current bring sites would be enhanced to maximise recycling uptake in line with ZWS recommendations. Glass recycling bags would be provided (via ZWS funding) to all households to transport glass to these bring sites.
- 2.6.2.2 Collection frequency at properties would not increase (one visit per household per week). The pattern of the proposed collections would be on a four weekly cycle:
Week 1: Residual Waste (Non-recyclable)
Week 2: Paper/Card
Week 3: Residual Waste (Non-recyclable)
Week 4 Plastic/Cans/Cartons
- 2.7 Other transitional costs would require to be funded by the Council. Applications for this funding will be submitted through the Council's Gateway Process for the Management of Capital Projects, including Spend to Save and Change Fund applications. The most significant is the need to provide a facility to sort and store recyclable materials prior to shipping.
- 2.8 The proposed changes would necessitate a review of commercial waste collection services and charging in 2018/19. Businesses are already required by law to separate recyclable waste streams (See Section 4.6).
- 2.9 If approved kerbside recycling would begin on one route in one area of Shetland in early-2018. This area would provide a representative sample of households and collection points for analysis - prior to full implementation before 1st July 2018. During this period recycling activity within the area will be monitored to ensure good service delivery is maintained - and ensure high recycling activity and quality. The area would continue recycling until full implementation across Shetland is established.

3.0 Corporate Priorities and Joint Working:

3.1 Our Plan sets out 20 Actions to be achieved by 2020. The issues set out in this report regarding the implementation of kerbside recycling in Shetland and its importance in the development of a new way of dealing with waste in Shetland relate to the following actions:

3.1.1 **Action 6** “Excellent financial-management arrangements will make sure we are continuing to keep to a balanced and sustainable budget, and are living within our means.”

Maximising the income generated from the sale of recyclable materials will help SIC waste services to sustain services to the population of Shetland. The greater the recycling rate achieved the higher the income to the council - and the more sustainable the service in the long-term.

3.1.2 **Action 8** “We will be working in a more effective way, allowing us to cope with reduced resources. Processes that add no obvious value will have been replaced with more proportionate approaches based on effectively managing risks.”

An efficient recycling sorting and storage process which adds the most value will extract as much income from the waste collected as possible while minimising future operational costs. A failure to prepare for future waste management demands, in the form of legislation without current derogation, would raise the risk of an even greater recycling transition costs being borne by SIC in the coming years.

3.1.3 **Action 10** “Our staff and the public will feel more informed about the council’s activities, through excellent communications systems.”

Implementing this proposed kerbside recycling collection service will enable the SIC to access funding for a communications contractor to help with public engagement during a recycling roll-out. This is crucial to facilitate the behavioural and attitude change that will be required to ensure a high recycling rate - and maximise the income generated. This implementation also offers a unique opportunity to engage with the public about one of the SICs core, and most visible, day-to-day activities.

3.1.4 **Action 17** “We will have reduced the effect we have on the local environment, particularly reducing carbon emissions from our work and buildings.”

The recycling rate in Shetland in 2015/16 was just 9%, the lowest in Scotland. This is 35% below the national average (44%). Recycling is one of the most efficient ways to reduce CO₂ emissions as it significantly reduces the amount of energy necessary to produce virgin materials. Kerbside recycling in Shetland would increase the quantity of waste recycled from approximately 220 tonnes per year to 1150-1750 tonnes per annum (ZWS, 2017).

3.1.5 **Action 18** “We will be collecting more of the money due to us for the services we provide.”

SIC visit over 11,000 households on a weekly basis collecting refuse. Much of the content of a typical black refuse bag in Shetland is recyclable - but very difficult to separate from residual non-recyclable waste. Adopting this

new collection model will make a sorting process viable and allow the SIC to access high-value recycling income streams. This represents an opportunity for the council to maximise income generated within our current waste collection service.

- 3.1.6 **Action 19** “More money will be going towards ‘spend to save’ initiatives, providing resources to fund innovative ways of working that save money but help us achieve our desired outcomes.”

There is a ‘spend to save’ case for the procurement of automated sorting and baling equipment. The anticipated payback on this machinery is 2.7-4.5 years.

- 3.2 The implementation of kerbside recycling would require joint working with Hjaltsland Housing - regarding refuse storage and collection areas in new build properties and ensuring recycling requirements are met within current stock. SIC would seek local support as well as knowledge and information from Community Councils during the implementation period. SIC would continue to work jointly with Zero Waste Scotland and the winners of an associated communication strategy tender to ensure successful roll out of kerbside recycling collection across Shetland in line with national priorities.

4.0 Key Issues:

4.1 The Charter and transitional funding

- 4.1.1 In October 2016, SIC signed the Household Recycling Charter. The Charter is a declaration of the SIC’s intent to provide services that deliver local and national benefits, encouraging high-levels of citizen participation in waste prevention, recycling and reuse. Signing the Charter enables the Council to call on Zero Waste Scotland’s expertise and knowledge of best practice and also opens the opportunity for the support funding to change services.

- 4.1.2 ZWS recognise that arrangements in remote rural and island authorities may, by necessity, need to be different from the urban approach to recycling. The principle of island and rural proofing appears to be recognised in an approach that seeks wider conformity across the Scottish local authorities.

- 4.1.3 SIC commitment to the Charter led to analysis undertaken by Zero Waste Scotland (ZWS) to identify gaps between the CoP and current waste services in Shetland. This options appraisal determined a preferred recycling collection system and allowed SIC to produce a Transition Plan. This identified the costs associated with meeting the CoP requirements and the preferred recycling collection identified.

- 4.1.4 This Transition Plan was submitted to ZWS in April (See Appendix 2). Some transitional funding, to help alleviate funding issues within existing budgets that may preclude the implementation the preferred recycling system, has subsequently been offered by ZWS. A total of £578,705 has been made available to SIC for 2017/18.

- 4.1.5 £499,966 of funding that has been agreed with Zero Waste Scotland for the procurement of waste receptacles for every household in Shetland, £8,000 for two further baseline service studies: collection efficiency and practicality

and route and refuse collection vehicle (RCV) efficiency.

- 4.1.6 £63,452 of funding has been offered by ZWS for a contractor to provide communications project management support to aid the effective communication of the introduction of a waste collection service in line with the Household Recycling Charter and associated Code of Practice to households in the Shetland Islands. A further £7,287 of funding has been made available to for staff training and additional resources.

4.2 National environmental targets

- 4.2.1 The current recycling rate in Shetland is 9% as oppose to the national average of 44%.
- 4.2.2 It is likely that SIC will be required to undertake kerbside recycling in future in order to help meet Scottish Government CO₂ reduction targets. The national recycling priority is set out in 'Scotland's Zero Waste Plan' (2010) - for a 70% recycling (+ composting + preparation for reuse) rate nationally and just 5% of waste to landfill by 2025.
- 4.2.3 More recently the Scottish Government published 'Making Things Last - A Circular Economy Strategy for Scotland' (2016) setting out interim targets. This includes a European Union target for 'Recycling and preparing for re-use of 50% by weight of household waste and similar' by 2020. It also restates the Scottish Government's own, more ambitious, '60% recycling/composting and preparing for re-use of waste from households' by 2020 target.
- 4.2.4 Meeting these targets is especially challenging for remote rural communities - and not possible within current SIC waste management operations. Nevertheless it is inevitable that SIC will be required to undertake kerbside recycling collections at some point in the short to medium term.

4.3 Regulatory compliance

- 4.3.1 The Waste (Scotland) Regulations requires local authorities to provide a separate collection for paper, card, plastics, metals and glass. In addition the Regulations state that where practicable no waste, including non-ferrous metals or hard plastics, should be incinerated.
- 4.3.2 To date the Council's waste management strategy has been focused on supplying household and commercial waste to the Energy Recovery Plant (ERP). The ERP has to conform to the Pollution Prevention and Control (Scotland) (PPC) Regulations 2012, which includes the implementation of the controls required under the European Waste Incineration Directive (WID). The controls are implemented by the conditions detailed in the PPC permit issued and enforced by SEPA.
- 4.3.3 A new condition in this year's PPC Permit states that as far as practicably possible non-ferrous metals shall be removed from the waste stream by December 2017. It is probable that SEPA will deem that SIC recycling bring sites are insufficient for separating and removing non-ferrous metals. As such there is already a need to consider kerbside recycling collection services. An alternative would be to pre-sort all waste prior to incineration, this would result in poorer quality, lower value recyclates at greater cost than

a kerbside collection.

- 4.3.4 A condition to remove hard plastic from the waste stream bound for the ERP has not been enforced in Shetland in the past. It is unlikely this derogation will remain in place in the medium and long term.
- 4.3.5 It was recognised that plastic was required to maintain the calorific value of the waste - and deliver sufficient heat output for the District Heating Scheme. To compensate for this omission the permitted maximum level of ERP waste throughput was lowered to 25,000 tonnes per year.
- 4.3.6 The calorific value of waste reduces when plastic is removed from the waste stream. This was seen clearly when the 5p carrier bag charge was introduced in Scotland. This coupled with national and international waste minimisation strategies means the quantity and quality of waste is reducing from an energy recovery perspective. There is already a requirement to burn more to deliver the same heat output.
- 4.3.7 A further decline in calorific content of waste available may necessitate an application for an increased ERP tonnage limit. This is unlikely to be granted without adhering to all relevant recycling recommendations and legislation. This scenario would threaten the ongoing operation of the ERP.

4.4 Future of the ERP

- 4.4.1 SIC are currently discussing the potential transfer of the ERP to Shetland Heat Energy and Power.
- 4.4.2 When the requirement to remove recyclable materials is enforced the ERP will have to change its business model. The most fundamental aspect of this change will be to find and use waste streams that maintain sufficient calorific content within operating tonnage limits. The ERP could secure a reliable source of waste, with suitable calorific value, via waste brokerage on the, now well established, recycling market.
- 4.4.3 This changes the operation of the ERP from burning municipal mixed waste to burning residual waste- refuse derived fuel. There is a significant demand for places to take residual waste. This will increase when there are changes to landfill legislation which will ban biodegradable waste going to landfill by 2021. The ERP charges a gate fee for accepting waste, including refuse derived fuel, which offsets its operating costs.

4.5 No increase to operational costs

- 4.5.1 Current SIC waste collection and disposal service costs are estimated to be £1,171,414 annually - as described in ZWS' draft Report on Transition Planning attached as Appendix 1. The introduction of kerbside recycling and an overall recycling rate of 20.2% is projected to reduce service costs by £24,708 per year - by increasing recycling income.

4.6 Commercial recycling

- 4.6.1 SIC currently undertakes free collection of some recyclable materials (glass and cans) for approximately 90 businesses in Shetland. This includes public halls, as many allow commercial activity on their premises.

Businesses are already required by the Waste (Scotland) Regulations 2012 to separate recyclable materials into six streams (Glass, Metal, Plastic, Cardboard, Paper and Food Waste*). Food waste separation is not a requirement in remote rural areas. This is enforced by the Scottish Environmental Protection Agency (SEPA).

4.6.2 Adherence to the Charter CoP for household waste will open up the possibility of Shetland-wide recycling collection for businesses as well. The operation of this service would be covered by the collection charges all commercial premises pay the SIC annually and the collected materials would boost recycling income streams.

4.6.3 Businesses that choose to pay the SIC for waste collection will be able to present waste in four Charter streams (Residual, Paper/Card, Plastic/Cans/Cartons and Glass). Each will be asked to take part in a survey to determine the quantity of these waste types they generate by volume. Engagement with business will form part of the overall communications strategy.

5.0 Exempt and/or confidential information:

5.1 NONE

6.0 Implications :

6.1 Service Users, Patients and Communities:

This proposed change to refuse collections will affect every resident and business in Shetland.

Any change to waste and recycling services will need an effective community engagement strategy to maximise participation with waste prevention, recycling, and reuse.

Funding is available from ZWS for communications, staff training and the dissemination of information to the public prior to any service change. A timetable for this work has been set out in principle in conjunction with ZWS.

Community Councils and organisations such as Living Lerwick and Sandveien & Nederdale Tenants and Residents Association will be consulted throughout the implementation period.

The project plan for implementation of the Shetland wide recycling service will include early implementation of kerbside recycling in early 2018 on one refuse collection route. In order to assess the practicalities of the new collection system and engage the public in the development of the new service.

6.2 Human Resources and Organisational

The impact of these changes on the workforce will be minimal.

Development:	<p>It is anticipated that the proposed changes to the service will continue to utilise existing staff in existing roles and within existing job specifications.</p> <p>The planned household collection frequency will ensure we can utilise our existing vehicle fleet.</p> <p>There will be no significant change to working hours or working locations for staff.</p> <p>Training will be provided to staff for use of any new machinery. Sorting recycling may offer an opportunity for 'lighter' duties within the service for staff requiring temporary adjustments to duties (e.g. if recuperating from injury).</p>
6.3 Equality, Diversity and Human Rights:	<p>These service changes will not require an Equalities Impact Assessment. Receptacles will be provided free of charge to every household.</p> <p>Whilst the intention is to provide individual households with two receptacles to recycle - part of the project considers how best to find solutions for challenging locations. For example, where wheeled bins may not be a safe collection solution</p>
6.4 Legal:	<p>Statutory duties regarding household waste collection are set out by part 11 of Environmental Protection Act 1990 'Waste on Land' (Sections 45 to 47); and subsequent amendments to this Act in the Waste (Scotland) Regulations 2012.</p> <p>In summary the SIC has the following legal duties and rights with respect to waste collection:</p> <ol style="list-style-type: none"> 1. <i>To arrange for the collection of household waste in its area except waste— (i) which is situated at a place which in the opinion of the authority is so isolated or inaccessible that the cost of collecting it would be unreasonably high and (ii) as to which the authority is satisfied that adequate arrangements for its disposal have been or can reasonably be expected to be made by a person who controls the waste.</i> 2. <i>No charge shall be made for the collection of household waste except in cases prescribed in regulations.</i> 3. <i>Where a waste collection authority has a duty to arrange for the collection of household waste from any premises, the authority may, by notice served on him, require the occupier to place the waste for collection in receptacles of a kind and number specified.</i> 4. <i>An authority must, from 1st January 2014, arrange for there to be provided to the occupier of every domestic property in its area such receptacles as will enable the separate collection of dry recyclable waste from the property. Subject</i>

to certain exceptions including for rural properties where the authority considers that the separate collection of dry recyclable waste from the property would not be environmentally or economically practicable.

- 5. An authority must, from 1st January 2016, arrange for there to be provided to the occupier of every domestic property in its area a receptacle which enables the separate collection of food waste from the property. Subject to certain exceptions including for rural properties.*
- 6. Separate collection means that waste is presented for collection, and collected, in a manner that ensures that—
(i) dry recyclable waste is kept separate from other waste;
(ii) waste from one dry waste stream is kept separate from waste in another such stream; and (iii) food waste is kept separate from other waste.*
- 7. An authority must, from 1st January 2014, take such steps as the authority considers reasonable to—
(a) promote separate collection (including the making of arrangements for the provision of a food waste receptacle);
and
(b) promote recycling in any other manner.*

6.5 Finance:	<p>The modelling of the proposed recycling scheme in the ZWS Transition Planning report, attached as Appendix 1, demonstrates an overall revenue saving of £25k per year (at a recycling rate of 20.2%). If more recyclable waste is diverted from residual disposal methods savings will increase. This is due to the high value of separated metals and a cheaper disposal route for recycled plastic (see Table 1 below).</p> <p>A total of £578,705 has been made available to SIC by ZWS for 2017/18 - to roll out a kerbside recycling collection scheme, as described in paragraphs 4.1.4 to 4.1.6 above. This transitional funding is only available in 2017/18.</p> <p>Table 1</p> <table><tr><th colspan="4">Cost of disposal/recycling routes to SIC waste services (subject to market fluctuation/ includes transportation)</th></tr><tr><th>Disposal route</th><th>Cost per tonne (April 2017)</th><th>Current Cost</th><th>Projected Recycling Cost</th></tr><tr><td>Residual Disposal Landfill</td><td>£84.40</td><td rowspan="2">£452,837</td><td rowspan="2">£397,700</td></tr><tr><td>Residual Disposal ERP</td><td>£45.50</td></tr><tr><td>Recycled Paper/Card</td><td>£59.59</td><td>-</td><td>£44,236</td></tr><tr><td>Recycled Aluminium</td><td>-£585.85</td><td rowspan="2">-£442*</td><td rowspan="2">-£19,107</td></tr><tr><td>Recycled Steel</td><td>-£34.15</td></tr><tr><td>Recycled Plastic</td><td>£6.11</td><td>£98*</td><td>£1,028</td></tr><tr><td>Recycled Cartons</td><td>£95.59</td><td>-</td><td>£1,339</td></tr><tr><td>Recycled Glass</td><td>£36.85</td><td>£7,077</td><td>£9,667**</td></tr><tr><td></td><td>TOTAL</td><td>£459,570</td><td>£434,862</td></tr></table> <p>* current costs/income from business and/or bring site recycling (in Lerwick and Scalloway) **higher due to estimated increase in glass recycling (+70t per year)</p> <p>Additional capital funding of approximately £750k will be required for a shed and sorting equipment referred to in paragraph 2.7 which will be the subject of a business case for capital funding including spend to save and change fund applications under the Council’s Gateway Process.</p>	Cost of disposal/recycling routes to SIC waste services (subject to market fluctuation/ includes transportation)				Disposal route	Cost per tonne (April 2017)	Current Cost	Projected Recycling Cost	Residual Disposal Landfill	£84.40	£452,837	£397,700	Residual Disposal ERP	£45.50	Recycled Paper/Card	£59.59	-	£44,236	Recycled Aluminium	-£585.85	-£442*	-£19,107	Recycled Steel	-£34.15	Recycled Plastic	£6.11	£98*	£1,028	Recycled Cartons	£95.59	-	£1,339	Recycled Glass	£36.85	£7,077	£9,667**		TOTAL	£459,570	£434,862
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6.6 Assets and Property:	<p>A shed and sorting equipment will be required for this project. A business justification case for this will be subject to the Council’s Gateway Process for the Management of Capital Projects and prioritisation in the Council’s Asset Investment Plan.</p>																																								
6.7 ICT and new technologies:	<p>An SMS recycling collection reminder service is being considered as part of the overall strategy. This will inform people the evening before a collection the correct material to be presented the following day. This would be delivered in conjunction with the SIC Communications team.</p>																																								
6.8 Environmental:	<p>Despite Shetland’s remote location recycling is one of the most efficient ways to reduce CO₂ emissions. It significantly reduces the amount of energy necessary to produce virgin materials.</p>																																								
6.9 Risk Management:	<p>Current and anticipated changes to the ERP’s permit regarding metals and plastic will require a suitable and sufficient</p>																																								

	<p>separation method to satisfy SEPA (See 4.3.3 & 4.3.4). The Council must operate lawfully and its current waste collection regime cannot demonstrate that non-ferrous metals are removed. Failing to meet recycling regulations in future puts at risk the operation of the ERP (see 4.3.7).</p> <p>The Council has a statutory duty to recycle, however it had been able to demonstrate that the ERP was the best practicable environmental solution to deal with Shetland's waste. This was due to the environmental benefit of the district heating scheme. This held the caveat that when an alternative heat source could be found for the District Heating Scheme burning mixed municipal waste would no longer be acceptable. The increased availability of Refuse Derived Fuel that can be disposed of at the ERP means that recycling would be a better environmental solution than burning waste (see 4.4.3).</p> <p>It is inevitable therefore that the Council would be challenged to increase its recycling activity in the near future in any case but at that stage SIC will not have access to any future ZWS transitional funding (see 2.6.1, 4.1.4 - 4.1.6). This means that if the recycling collection does not progress now the Council would pay the full cost of implementation at a later date, as well as missing out on specialist support from ZWS.</p> <p>The collection of recyclable waste in future without investment in a suitable facility with suitable sorting equipment would mean SIC would fail to maximise recycling income streams (See 4.5.1 & 6.5).</p>	
6.10 Policy and Delegated Authority:	In accordance with Section 2.3.1 of the Council's Scheme of delegations, the Environment and Transport Committee has responsibility for discharging the powers and duties of the Council within its functional area.	
6.11 Previously considered by:		

Contact Details:

Colin Bragg, Team Leader – Waste Management
colin.bragg@shetland.gov.uk Job Title, emailaddress@shetland.gov.uk
10 August 2017

Appendices:

Appendix 1 - Code of Practice: Transition Planning (ZWS, April 2017)
Appendix 2 - Charter for Household Recycling – Transition Plan Application (SIC, April 2017)

Background Documents:

Code of Practice –Household Recycling in Scotland,
<http://www.zerowastescotland.org.uk/sites/default/files/Household%20Recycling%20COP%20v2.pdf>

END

Report

June 2017

Shetland Islands Council

Code of Practice: Transition Planning



Shetland
Islands Council

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1 Introduction

1.1 The regulatory & policy landscape – drivers for change

Zero Waste Scotland provided support to Shetland Islands Council to appraise the impacts of introducing new household recycling services as required by the [Waste \(Scotland\) Regulations 2012](#). The study focused on services that align with the [Household Recycling Charter](#) and the Code of Practice. The changes to services required by these regulations/policies include:

- The Waste (Scotland) Regulations requires local authorities to provide a separate collection for paper, card, plastics, metals and glass. In addition the Regulations state that where practicable no waste, including non-ferrous metals or hard plastics, should be incinerated; and
- Signatories of the Household Recycling Charter commit to maximising recycling to support a more circular economy, to adopt more consistent collections that will lead to more efficient services and an increase in the quality and quantity of recycling collected.

At present the recycling services provided by the Council are limited to a small number of recycling points where glass, cans and plastics are collected; hence aligning with the requirements outlined above will involve a major change to services.

To date the Council's waste management strategy has been focused on supplying household and commercial waste to its Energy from Waste facility (EfW) which provides heat to a local district heating scheme servicing approximately 1,000 properties. A contract is in place between Shetland Heat and Power Limited (SHEAP) and the Council which obligates the Council to provide an average of 6.3 MW per hour, operating for 8,040 hours per year until 2020. The Council is currently in negotiations with SHEAP which is expected to result in SHEAP taking on the ownership and operation of the EfW and import of waste to the EfW from elsewhere. Up until now the Council has had to effectively treat the vast majority of the waste it collects at the EfW (in addition to importing waste from Orkney and/or Highland). The revised arrangement is likely to mean that recycling services can be introduced without a detrimental decrease in heat provided by the EfW to the district heating scheme.

1.2 SIC's current services

The household waste and recycling services currently provided by the Council are:

- General waste is collected weekly in sacks;
- General waste in Fair Isle, Foula, Papa Stour and Skerries is collected by a contractor and transported to Lerwick in a skip;
- The Council operates 41 recycling points for colour mixed glass, 39 recycling points for mixed cans and 8 recycling points for plastics. The recycling points are mainly located in Lerwick/Scalloway; and
- One Household Waste and Recycling Centre (HWRC) at Gremista Waste management facility. Scrap metal and WEEE are collected and recycled. Wood and garden waste are shredded.

Waste from commercial premises is mainly co-collected with household waste. The Council is the only waste collector in Shetland and is currently undertaking a review of commercial waste contracts with a view to identifying any premises that do not have a contract, and therefore may be illegally using the household waste collection service.

The Council has identified a savings requirement of 4.5% year on year for all Council waste and recycling activities.

1.3 Timescales for change

The Council plans to review its options over the coming weeks. Should officers decide upon a preferred option they intend to submit a funding application to Zero Waste Scotland prior to the 4pm deadline on Thursday 27th April. Zero Waste Scotland's funding is available to support councils with one-off capital costs associated with aligning services with the Household Recycling Charter. The Council intends to have formalised detailed plans for the new service by November 2017, with implementation shortly thereafter.

2 Methodology

2.1 Overview of approach

The standard approach to appraise alternative service options is typically to:

1. Build a model which reflects the performance and costs of the current service incorporating both collection and disposal/treatment costs;
2. Appraise multiple alternative scenarios which enable comparison with the current service. This involves undertaking research into benchmarks and assumptions to feed into the analysis; and
3. Shortlist options and refine analysis.

There are several reasons why the standard approach described above is not a good fit for Shetland Islands Council. These include:

1. Collection approach: General waste is currently collected weekly in sacks, however in practice residents commonly present their general waste sacks in wheeled bins, “bruck boxes”, nets and communal bins. Also, general waste is often stored and/or presented for collection at the edge of a hamlet, at the bottom of a driveway/track or at collection points.
 - a. Disperse housing density and varying collection approaches (described above) means that it is not possible to use waste or recycling collection statistics from other councils to benchmark with Shetland.
 - b. It was agreed that further work is needed to understand what recycling container options will be best suited to different property types. Survey work may be needed to understand the current collection approach for individual properties; this information can be used to inform the preferred recycling container(s) option. It will be important to consider the impact of different recycling containers on the productivity (speed) of the collections and therefore the cost of the service.
2. Commercial waste: Commercial waste is co-collected with general waste from households. Officers expect that a proportion of commercial premises have not subscribed to a commercial waste collection and may be presenting commercial waste as household waste – this would mean that household waste arisings are over reported and/or that less resource than expected is required to undertake household waste collections.

A bespoke approach has therefore been adopted throughout this study to assist the Council to appraise changes to its services. The following steps were undertaken:

1. Current service appraisal: this study will describe the costs and performance associated with the current service. The analysis will provide a detailed breakdown of collection and treatment/disposal costs (see Chapter 3);
2. Disposal budget - impacts appraisal: this appraisal will consider the expected impact of introducing recycling collections on the disposal/treatment budget. This appraisal will incorporate assumptions on material values (gate fees/incomes) and haulage costs. The appraisal will enable officers to understand whether a 4.5% year on year budget reduction is likely to be possible and/or whether the Council will need to undertake collections with the same/less/greater collection budget compared to the current service (see Chapter 4);
3. Review of capital investment: the expected capital expenditure required to implement the service (excluding capital associated with collection vehicles) will be estimated (see Chapter 5).

Next steps are discussed in Chapter 6.

3 Current service

3.1 Introduction

This section provides a description of the analysis that was undertaken to estimate Shetland Islands Council current collection cost and disposal/treatment cost.

3.2 Collection costs

The profile of the number of vehicles, drivers and collectors used to deliver the weekly general household waste collection is shown in Table 3.1 (correct at the time of writing, March 2017).

Table 3.1 Current service resource profile

Area	Number of households *	Number of FTE vehicles	Mon	Tues	Wed	Thu	Fri	Crew level
Lerwick, Scalloway & Bressay	3,613	1.0 x 26T RCV						D+3
South Mainland	2,383	1.0 x 26T RCV						D+2
North Mainland & West	2,054	1.0 x 26T RCV						D+1
North Isles	1,038	0.8 x 26T RCV				Spare		D+1
East and Whalsay	845	0.4 x 26T RCV	Spare					D+1
Small vehicle	1,127	0.4 x 7.5T RCV	N remote, Lerwick	West side	Scalloway & Bressay	Spare		D+0.1 **
Total	11,060	4.4 x 26T RCVs 0.8 x 7.5T RCVs						6.0 drivers 8.1 loaders

* In addition there are approximately 150 properties on Skerries, Papa Stour, Fair Isle and Foula. A skip service rather than kerbside collection is provided in these areas. ** A loader is used on Monday afternoons when collecting in Lerwick.

The cost of the collections was appraised using a spreadsheet model – this process is described in the section below. Where council officers have provided cost data which has been used to inform assumptions the data is shown in **blue**. Where assumptions have been made by Zero Waste Scotland the data is shown in **orange**.

The analysis to determine the operating cost of the current collection service included appraisal of:

- **Staffing costs:**
 - Officers provided indicative costs for drivers and loaders which included salary, national insurance and pension contributions. Sickness cover (calculated by officers to be 2.2%) was added to the cost and incorporated in the model.
 - Both core and spare staff were incorporated into the calculated costs.

Table 3.2 Indicative staffing costs

Crews	Unit cost (all costs) £/yr	Number of staff	Cost (£/yr)
Driver (HGV)	£36,792	5.0	£183,960
Driver (7.5T)	£29,638	1.0	£29,638
Loader	£29,638	8.1*	£240,068
Total			£453,666

* A loader is used on Monday afternoons when collecting in Lerwick.

- **Vehicle costs:**

- Depreciation of capital assets is commonly incorporated into council's revenue budgeting. To estimate the depreciation of collection vehicles it was assumed that vehicles are depreciated over 7 years (0% finance).
- Indicative vehicle running & standing costs have been incorporated into the assessment based upon data supplied by another council – this will be updated with Shetland Islands Council data once the information is available.
- Spare vehicles have not been included when calculating running costs as it is assumed that spare vehicles are only used when core vehicles are off the road.

Table 3.3 Indicative vehicle costs

Vehicle type	Capital Cost	Annualised cost at 0% financing over a 7 yr payback	Standing costs	Running costs	Number of vehicles	Total cost (£/yr)
26T RCV	£147,500	£21,071	Insurance £2,300 Road Tax £650 Total = £2,950	Maintenance £9,333 Fuel £18,773 Total = £28,106	4.2 core 0.8 spare	£238,152
7.5T RCV	£80,000	£11,429	Insurance £1,623 Road Tax £200 Total = £1,823	Maintenance £3,041 Fuel £8,249 Total = £11,290	0.6 core 0.4 spare	£20,026
Total						£258,178

- **Container replacements:**

- Councils typically include a line for container replacements within their budget however Shetland Islands Council do not provide containers and therefore a cost has not been incorporated in this assessment (N.B. The Council provides residents with an option to purchase a 240L bin however the charge ensures that there is full cost recovery; a small number of 1100L bins are used for communal collections however repair/replacement costs are low and have therefore not been included).

- **Exclusions:** The analysis does not incorporate the cost of collecting from bring sites, nor does it include the operation of Grimista Recycling Centre and Transfer Station.

3.2.1 Overview of collection costs

Table 3.4 provides an overview of Shetland Islands Council's estimated annual collection cost:

Table 3.4 Overview of collection costs

Collection costs	£/year
Staffing (incl admin)	£453,666
Container replacements	£0
Vehicle running & standing	£258,178
Total	£711,844

3.3 Disposal and treatment costs

In 2015 the Council collected 6,925T of general household waste at the kerbside and 3,029T at the HWRC. 296T¹ was collected at the HWRC/bring sites for recycling which consisted of:

- 192T mixed glass;
- 11T aluminium cans;
- 16T mixed plastic bottles;
- 7.1T mineral oil; and
- 70.2T textiles and footwear.

The analysis to determine the current disposal/treatment cost included appraisal of:

- **Residual treatment**
 - The Council sends general waste for treatment at its Energy from Waste (EfW) facility. The gate fee paid is currently £46.15/tonne.
 - In 2015 326T of burnt metal was recovered from the EfW and sent for recycling. The income for burnt metal varies month by month therefore an indicative value of £20/tonne has been assumed for the purpose of this assessment.
 - Table 3.5 provides an overview of the annual costs (negative figures equate to the council receiving an income rather than paying a gate fee).

Table 3.5 Residual treatment costs

	Weight collected (T)	Gate fee (£/T)	Weight of burnt metals (T)	Burnt metals income (£/T)	Net gate fee (£/T)	Annual cost (£/yr)
Kerbside	6,925	£46.15	3.3%	-£20.00	£45.50	£315,050
Non-kerbside	3,029					£137,788
Total	9,953					£452,837

- **Recycling**
 - There will be no impact upon the collection/recycling of mineral oil and textiles/footwear and therefore these materials have not been included in the calculated costs.
 - The income and haulage costs for recycling vary month by month therefore indicative values shown in Table 3.6 have been agreed with officers and used for the purpose of this assessment.

Table 3.6 Recycling costs

	Weight collected (T)	Destination	Gate fee (£/T)	Haulage cost/ journey (£)	Effective payload (T)	Net gate fee (£/T)	Annual cost (£/yr)
Glass	192.03	Viridor, Newhouse	-£15	£1,400	27T	£36.85	£7,077
Mixed cans	11.04	Local scrap merchant	-£40	N/A	N/A	-£40.00	-£442
Plastic bottles	15.96	Plastics Reclamation Ltd	-£80	£1,550	18T	£6.11	£98
Total	219.03						£6,733

¹ All 296T was recycled, no material was rejected.

3.3.1 Overview of disposal/treatment costs

Table 3.7 provides an overview of Shetland Islands Council's estimated annual disposal/treatment cost:

Table 3.7 Overview of disposal/treatment costs

Disposal/ treatment	£/year
Dry recycling income/cost	£6,733
Organics gate fees	£0
Residual waste disposal	£452,837
Total	£459,570

3.4 Performance of current service

Table 3.8 describes the management routes of all household waste collected in 2015. This information has been used in the analysis to predict the expected recycling rates for the scenarios.

Table 3.8 Waste Management Routes

2015	%	Tonnes	Calculation of waste management route
Kerbside & non-kerbside general waste collected	0.2%	14.9	of general waste is sent directly to landfill
	<u>67.7%</u>	<u>6,738.3</u>	of general waste is sent to EfW:
	➤ 29.5%	1,987.8	• of general waste sent to EfW is then sent to landfill.
	➤ 1.9%	125.2	• of general waste sent to EfW is then sent to "Other" (doesn't contribute to the recycling rate)
	➤ 68.6%	4,625.3	• of general waste is treated at EfW (final destination)
	<u>32.2%</u>	<u>3,200.2</u>	of general waste is sent to dirty MRF:
	➤ 8.0%	341.7	• of general waste sent to a dirty MRF is then sent to landfill
	➤ 71.9%	1,719.0	• of general waste is sent to a dirty MRF is sent to EfW
	➤ 20.1%	480.4	• of general waste is sent to a dirty MRF is sent to reprocessor and recycled.
Recycling collected	100%	296.3	Of recycling is sent to a reprocessor and recycled
Waste treated/disposed		2,258.5	Total landfilled (tonnes)
		6,926.7	Total incinerated (tonnes)
		939.4	Total recycled/reused (tonnes)
		125.2	Total other landfill diversion (tonnes)
		9.2%	Recycling rate

3.5 Summary of current service costs

An overview of the costs associated with the current service baseline is provided in Table 3.9.

A variation of the baseline has been appraised which considers the impact that would be seen if following the sale of the EfW, there was an increase in the EfW gate fee to £55/tonne (assumes no income is received for burnt metal). The analysis suggests that if the gate fee increased to £55/tonne there would be an increased cost of £94,602/year.

Table 3.9 Summary of baseline kerbside service costs

	Current service costs	Variation: Increased EfW gate fee
Collection cost	£711,844	£711,844
Staffing	£453,666	£453,666
Container replacements	£0	£0
Vehicle running & standing	£258,178	£258,178
Disposal/ treatment	£459,570	£554,172
Dry recycling income/cost	£6,733	£6,733
Organics gate fees	£0	£0
Residual waste disposal	£452,837	£547,440
Total revenue	£1,171,414	£1,266,016

The Council has identified a savings requirement of 4.5% year on year; based on the calculated current service costs this is equivalent to approximately £52,714/year*.

*The calculated service costs exclude operation of bring sites, commercial collections and Grimsta Recycling Centre and excludes recycling of mineral oils and textiles and footwear.

4 Disposal budget - impacts appraisal

4.1 Introduction

This section provides a description of the analysis that was undertaken to estimate the impact of the introduction of recycling services on the Council's disposal/treatment budget.

The appraisal will enable officers to understand whether a 4.5% year on year budget reduction is likely to be possible, and/or whether the Council will need to undertake collections with the same/less/greater collection budget compared to the current service.

4.2 Recycling collections - Code of Practice requirements

The Code of Practice requires councils to collect a consistent range of materials for recycling. These are classified as accepted; accepted where markets are emerging or because non-collection could affect recycling behaviours; and unacceptable.

The materials that Shetland Islands Council will need to collect in order to align with the Code of Practice are described in Table 4.1:

Table 4.1 Targeted materials

Material	Classification in CoP	Material types
Paper	Accepted	Newspapers, magazines, pamphlets, directories, envelopes (including glue and windows), brochures, office paper, letters, catalogues, unwanted mail.
	Accepted because markets are emerging or because non-collection could affect recycling behaviours	Shredder paper, wrapping paper, paperback books.
Card	Accepted	Cereal boxes, brown corrugated packaging, sleeves from ready meals, toilet/kitchen roll tubes, greetings cards, egg boxes, toothpaste boxes.
	Accepted because markets are emerging or because non-collection could affect recycling behaviours	Contaminated food boxes (e.g. pizza).
Glass	Accepted	Bottles & jars (including metal tops & corks).
Metals	Accepted	Tins and cans, aerosols (for personal use).
	Accepted because markets are emerging or because non-collection could affect recycling behaviours	Foil trays, aluminium/tin foil.
Plastics	Accepted	Plastic bottles.
	Accepted because markets are emerging or because non-collection could affect recycling behaviours	Small bottles from yoghurt drinks, food & drink pots, tubs and trays of all colours.
Cartons	Accepted	Food & drink cartons.
	Accepted because markets are emerging or because non-collection could affect recycling behaviours	Straws and caps that are integral to the carton.

The Code of Practice specifies that materials should be collected in the following containers:

- Container 1: Paper and cardboard;
- Container 2: Plastics, metals and cartons;
- Container 3: Glass (glass may be collected either at the kerbside or at bring sites).

The following scenarios have been appraised to determine the expected impact upon the disposal/treatment costs incurred by the Council:

- Scenario 1: All Code of Practice materials collected at the kerbside; and
- Scenario 2: Glass collected at bring sites, all other materials collected at the kerbside.

The collection approach options (frequency, vehicles and containment) have not been considered as part of this review.

For each scenario three performance variations have been considered. Performance assumptions have been based on a BPEO study commissioned by Zero Waste Scotland undertaken by Eunomia – these options are described in Table 4.2.

Table 4.2 Options appraised in BPEO study

Option	Residual Frequency	Residual Receptacle	Materials targeted for kerbside collection	Recycling Frequency	Recycling Receptacle
1	Weekly	180L Bin	Cans/Glass	Fortnightly	55L Box
2	Weekly	180L Bin	Cans/Glass	Fortnightly	55L Box
3	Weekly	180L Bin	Cans/Glass/Plastics/Paper/Card	Fortnightly	2x 55L Box
4	Fortnightly	180L Bin	Cans/Glass/Plastics/Paper/Card	Fortnightly	2x 55L Box
5	Fortnightly	180L Bin	Cans/Glass/Plastics/Paper/Card	Weekly	2x 55L Box
6	Weekly	180L Bin	Cans/Plastics/Paper/Card	Fortnightly	240L Bin
7	Fortnightly	180L Bin	Cans/Plastics/Paper/Card	Fortnightly	240L Bin

The three performance variations appraised in this Code of Practice study are:

- Low recycling performance (assumptions based on BPEO Option 3);
- Medium recycling performance (assumptions based on BPEO Option 4); and
- High recycling performance (assumptions based on BPEO Option 5).

Finally, two variations were considered for the EfW gate fee; the current price and the higher gate fee of £55/tonne.

Table 4.3 describes the two scenarios, three performance variations and two EfW gate fee variations, equating to twelve variations in total.

Table 4.3 Overview of scenarios and variations

Scenario		Performance variation	Current refuse gate fee (a)	Higher refuse gate fee (b)
1	Glass at kerbside	Low Recycling	sc 1a_Low	sc 1b_Low
		Medium Recycling	sc 1a_Med	sc 1b_Med
		High recycling	sc 1a_High	sc 1b_High
2	Glass at bring sites	Low Recycling	sc 2a_Low	sc 2b_Low
		Medium Recycling	sc 2a_Med	sc 2b_Med
		High recycling	sc 2a_High	sc 2b_High

4.3 Overview of assumptions

The assumptions built into this appraisal include:

- Anticipated weights collected (informed by the BPEO study); and
- Expected impacts on the gate fee/income/haulage for each stream of recycling.

4.3.1 Performance assumptions

As previously described performance assumptions have been informed by Options 3-5 of the BPEO study. It has been assumed that additional recycling is captured directly from the residual waste stream and that there is no change to the overall waste arisings. Table 4.4 describes the performance assumptions:

Table 4.4 Performance assumptions

Material collected	Average weight collected (kg/hh/wk) from the kerbside and bring sites			
	Current service	Performance variation		
		Low	Medium	High
Paper & card	-	1.2	1.5	1.8
Metals	0.02	0.2	0.2	0.3
Mixed plastics	0.03	0.2	0.3	0.4
Cartons*	-	0.019	0.024	0.029
Glass – kerbside (Scenario 1)	-	1.0	1.2	1.2
Glass – banks (Scenario 2)**	0.33	0.4	0.45	0.5

* Carton weights were not predicted in the BPEO study and therefore estimates have been based upon weights collected by other local authorities. ** It has been assumed that the Council would expand the network of glass brings sites and therefore that the weight of glass collected would increase slightly.

It has been assumed that contamination of recycling streams is minimal and therefore that 100% of collected material is recycled. Expected recycling rates are shown in Table 4.5:

Table 4.5 Scenario recycling rates

Current service	1_Low	1_Medium	1_High	2_Low	2_Medium	2_High
9.2%	23.1%	26.4%	29.4%	19.8%	22.6%	25.6%

4.3.2 Recycling gate fee/income/haulage assumptions

Table 4.6 describes the assumed destinations, gate fees/incomes and haulage costs for each material stream. To sort material into the streams described in Table 4.6 it is likely that a sorting line is required – this is considered in Chapter 5.

Table 4.6 Recycling outlets

Material	Assumption
Glass	Currently shipped to Viridor. There is no expected change to the quality or composition of material and therefore it is assumed that there is no change to the average income and haulage costs per tonne.
Metals	Metals are currently sold to a local scrap merchants. It is assumed that the increased weights collected at the kerbside will enable the Council to get a better outcome by sorting metals into aluminium and steel streams, baling the two streams and sending them to the mainland. It is assumed that the Council will receive £650/T income for aluminium and £30/tonne income for steel. An example destination for metals is ACE, Alloa (who supply Novellis). It has been assumed that the cost to haul a full load to ACE is £1,283* and that the achievable payload is 20T. It is assumed that the composition of metals is 1/3 aluminium, 2/3 steel.
Mixed plastics	A review of plastics incomes received by other LAs suggests that they are receiving a similar price as Shetland do for baled plastic bottles. It has therefore been

	assumed that there is no change to the average income and haulage costs per tonne.
Mixed paper and card	It is assumed that the Council will receive £35/T income for mixed paper and card. An example destination is UPM, North Wales. It has been assumed that the cost to haul a full load to UPM is £1,883 (£1,283 + £600 haulage from the Central Belt to North Wales) and that the achievable payload is 22T**.
Cartons	It is assumed that the Council will pay a £10/T gate fee for cartons. An example destination is ACE, Halifax. It has been assumed that the cost to haul a full load to ACE is £1,883 (£1,283 + £600 haulage from the Central Belt to Halifax) and that the achievable payload is 22T**.

* Estimated haulage cost provided by officers for a shipment from Lerwick to the Central Belt.

** Estimated achievable payload capacity estimated by Falkirk Council (assumes loose material transported in a walking floor artic).

Table 4.7 describes the impact of the recycling gate fee/income and haulage costs described in Table 4.6 plus the saving at the EfW.

Table 4.7 Expected impact on disposal/treatment costs (£46.15/T EfW gate fee)

	Current_a	1a_Low	1a_Med	1a_High	2a_Low	2a_Med	2a_High
Dry recycling income/ cost	£6,733	£41,616	£52,282	£57,473	£28,314	£37,162	£42,188
Organics gate fees	£0	£0	£0	£0	£0	£0	£0
Residual waste disposal	£452,837	£393,952	£379,034	£365,136	£410,374	£397,700	£384,006
Disposal/ treatment	£459,570	£435,568	£431,316	£422,610	£438,688	£434,862	£426,195
Variation from current	N/A	-£24,002	-£28,254	-£36,960	-£20,882	-£24,708	-£33,375

Table 4.8 describes the impact of the recycling gate fee/income and haulage costs described in Table 4.6 plus the saving at the EfW based on the higher EfW gate fee of £55/tonne.

Table 4.8 Expected impact on disposal/treatment costs (£55/T EfW gate fee)

	Current_b	1b_Low	1b_Med	1b_High	2b_Low	2b_Med	2b_High
Dry recycling income/ cost	£6,733	£41,616	£52,282	£57,473	£28,314	£37,162	£42,188
Organics gate fees	£0	£0	£0	£0	£0	£0	£0
Residual waste disposal	£547,440	£476,252	£458,218	£441,417	£496,105	£480,784	£464,229
Disposal/ treatment	£554,172	£517,869	£510,500	£498,890	£524,419	£517,946	£506,418
Variation* from current	N/A	-£36,304	-£43,672	-£55,282	-£29,753	-£36,227	-£47,755

* In Table 4.8 the current service and scenarios costs are based on the assumption that the EfW gate fee is £55/T; hence the variation shown is the variation between the scenarios @ £55/T and the current service at £55/T.

4.3.3 Recycling gate fee/income/haulage assumptions – Low capital scenario

If the Council is unable to invest in a sorting line for cans, plastics and cartons it will be necessary to send loose material to a MRF for sorting.

Table 4.9 describes the assumed destinations, gate fees/incomes and haulage costs for each material stream.

Table 4.9 Recycling outlets

Material	Assumption
Glass	Currently shipped to Viridor. There is no expected change to the quality or composition of material and therefore it is assumed that there is no change to the average income and haulage costs per tonne.
Plastics, metals and cartons	It has been assumed that plastics, metals and cartons will need to be sent loose to the mainland for sorting at a MRF and the gate fee will be £40/tonne. It is anticipated that the achievable payload for loose material on a walking floor artic will be approximately 9T. It has been assumed that the cost per journey for haulage is £1,550 (as per the current cost for plastics haulage).
Mixed paper and card	It is assumed that the Council will receive £35/T income for mixed paper and card. An example destination is UPM, North Wales. It has been assumed that the cost to haul a full load to UPM is £1,883 (£1,283 + £600 haulage from the Central Belt to North Wales) and that the achievable payload is 22T**.

Table 4.10 describes the impact of the recycling gate fee/income and haulage costs described in Table 4.9 plus the saving at the EfW. The purpose of this analysis is to consider a “low capital” alternative to the Council operating its own sorting facility – therefore the scenarios are denoted with “_LC” to distinguish between this analysis, and the earlier analysis in which it was assumed the Council operated a sorting facility.

Table 4.10 Expected impact on disposal/treatment costs, Low capital (£46.15/T EfW gate fee)

	Current_a	1a_Low_LC	1a_Med_LC	1a_High_LC	2a_Low_LC	2a_Med_LC	2a_High_LC
Dry recycling income/cost	£6,733	£104,637	£131,471	£161,411	£91,335	£116,351	£146,126
Organics gate fees	£0	£0	£0	£0	£0	£0	£0
Residual waste disposal	£452,837	£393,952	£379,034	£365,136	£410,374	£397,700	£384,006
Disposal/treatment	£459,570	£498,588	£510,505	£526,548	£501,708	£514,052	£530,133
Variation from current	N/A	£39,018	£50,935	£66,978	£42,138	£54,482	£70,563

Table 4.11 describes the impact of the recycling gate fee/income and haulage costs described in Table 4.9 plus the saving at the EfW based on the higher EfW gate fee of £55/tonne.

Table 4.11 Expected impact on disposal/treatment costs (£55/T EfW gate fee)

	Current_b	1b_Low_LC	1b_Med_LC	1b_High_LC	2b_Low_LC	2b_Med_LC	2b_High_LC
Dry recycling income/ cost	£6,733	£104,637	£131,471	£161,411	£91,335	£116,351	£146,126
Organics gate fees	£0	£0	£0	£0	£0	£0	£0
Residual waste disposal	£547,440	£476,252	£458,218	£441,417	£496,105	£480,784	£464,229
Disposal/ treatment	£554,172	£580,889	£589,689	£602,829	£587,440	£597,135	£610,356
Variation* from current	N/A	£26,717	£35,517	£48,656	£33,267	£42,963	£56,183

* In Table 4.10 the current service and scenarios costs are based on the assumption that the EfW gate fee is £55/T; hence the variation shown is the variation between the scenarios @ £55/T and the current service at £55/T.

5 Capital Considerations

5.1 Introduction

The cost of collecting recycling has not been appraised in this study and therefore it is not possible to estimate the impact revenue or capital costs.

The section below provides an overview of example capital expenditure which may need to be considered.

5.2 Collection containers

Collection container purchase costs and estimated replacement rates (e.g. due to damage or loss) are described in Table 5.1.

Table 5.1 Collection container cost assumptions

Containers	Estimated price per unit (£) including delivery to Lerwick	Estimated capital Cost (£)	Estimated replacement rate %	Estimated replacement cost per year (revenue budget) £/yr
240L bin	£22	£246,620	5%	£12,331
140L bin	£20	£224,200	5%	£11,210
Recycling box	£5	£56,050	10%	£5,605
Recycling trolley	£35	£392,350	5%	£19,618

If the Council decided to provide residents with two bins and a box for recycling collections, the estimated capital cost for containers is £549,290 and the estimated revenue cost for container replacements is £30,267.

5.2.1 Glass bring sites

In Scenario 2 the Council will need to maximise the distribution of glass bring sites as glass will not be collected at the kerbside.

5.3 Sorting line

As plastics, cans and cartons are collected mixed the Council will need to arrange for these to be sorted before they can be sold to reprocessors. Undertaking the sorting locally (e.g. in-house) will enable the Council to sort and bale plastics, aluminium, steel and cartons, maximising the cost efficiency of haulage. It is estimated that approximately 224 – 387T of mixed plastics, cans and cartons will need to be sorted per year. Moray Council and its contractor operate a similar sorting facility for plastics and cans with a throughput of 1.15 tonnes per hour. It is therefore expected that Shetland Islands Council could operate the facility part-time to sort plastics, cans and cartons (estimated to be operating for 4-6 hours per week).

Anticipated one off capital and annual operating costs to operate a sorting facility are described in Table 5.2.

Table 5.2 Sorting facility capital and operating costs

Plastics, cans & cartons sorting	Capital costs	Operating costs (£/year)		
		Annual depreciation (2%, 15 years)	Electricity and maintenance	Staffing
Hopper	£20,000	£20,818	£14,000	£16,000
Conveyors – 10m	£20,000			
Magnet	£15,000			
Picking stations – 2	£45,000			
Baler	£75,000			
Eddy current	£57,500			
Can baler	£35,000			
Total	£267,500	£50,818		

In addition to the costs described in Table 5.2 the Council may need to consider if there will be any additional costs associated with:

- Storing loose material once it has been tipped by collection vehicles;
- Storing baled material before it is exported; and
- A building to house the sorting line if space can not be found within existing facilities.

5.4 Major service change

The Council will need to communicate the service change with residents. It is estimated that a comprehensive communications campaign will cost £1.20 per household.

In order to deliver the service change the Council will require additional internal resources. These temporary staff will help plan the service change, deliver containers and communication materials and respond to enquiries. An indicative budget of £0.50 per household has been included in the appraisal.

Frontline staff will require training and skills development linked to the new service. An indicative budget of £0.15 per household has been included in the appraisal. These costs are described in Table 5.3.

Table 5.3 Major service change costs

Description	Estimated cost per household (£/hh)	Estimated capital Cost (£)
Communications (e.g. letters & leaflets)	£1.20	£13,452.00
Internal resources	£0.50	£5,605.00
Frontline staff training	£0.15	£1,681.50
Total		£20,738.50

6 Discussion

- Recycling rates are expected to increase to c. 20-27%.
- Treatment/disposal savings estimated of c. £21-28K/yr (below 4.5% required saving of £52,714/year)
- Once container replacements and sorting line operating costs are accounted for it is estimated that there will be an increase in treatment/disposal costs.



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APPLICATION FORM

Zero Waste Scotland Household Recycling Charter Transition Plan

2HR010-000

IMPORTANT NOTES

Please contact your relevant Sector Manager if you have any questions or require any assistance with completing the transition plan.

Please complete all sections of this form electronically; altering the size of the boxes and the position of the page breaks as necessary. Incomplete applications will not be assessed. Should you need to continue any section on additional sheets, please indicate the relevant section reference on each sheet. Also please add appendices to support your application.

SUBMISSION INSTRUCTIONS

Please email one electronic copy of your application together with all supporting evidence to Lynda Stephens, Lynda.Stephens@zerowastescotland.org.uk, telephone number 01786 239728.

CONTENTS

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Section 2	Project Description
Section 3	Costs
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Section 6	Declaration
Section 7	Supplementary Information

Section 1: Local Authority Details

1.1 Name of Council
Shetland Islands Council

1.2 Address of Council
Shetland Islands Council Town Hall Lerwick Shetland ZE1 0JL UK

1.3 Contact details				
a) Name and job title of person dealing with this application.				
William Spence – Executive Manager (Environmental Services)				
Tel No:	01595 74 5163	Mobile:	07766 421 052	Fax:
E-mail address:	william.spence@shetland.gov.uk			
Address	Environmental Services, Infrastructure Services Department, Shetland Islands Council, Gremista, Lerwick, Shetland. ZE1 0PX			

b) Name and job title of the Project Manager (if different to person named above)				
Tel No:		Mobile:		Fax:
E-mail address:				
Address				

1.4 How many households (total) are in your area?	11,210
--	--------

Section 2: Project Description

2.1 Please provide a description of the proposed service change, how many properties are included (kerbside, flats, rural – where all properties are not included provide a reason for this), alternatives considered and the reasoning for the decision taken?

We plan to introduce new household recycling services as required by the Waste (Scotland) Regulations 2012. The services will align with the Household Recycling Charter and the Code of Practice. This will include separate collection for paper, card, plastics, metals and glass.

As Signatories of the Household Recycling Charter we commit to maximising recycling to support a more circular economy, to adopt more consistent collections that will lead to more efficient services and an increase in the quality and quantity of recycling collected.

At present the recycling services provided by the Council are limited to a small number of recycling points where glass, cans and plastics are collected; hence aligning with the requirements will involve a major change to services.

The household waste and recycling services currently provided by the Council are:

- General waste is collected weekly in sacks;
- General waste in Fair Isle, Foula, Papa Stour and Skerries is collected by a contractor and transported to Lerwick in a skip;
- The Council operates 41 recycling points for colour mixed glass, 39 recycling points for mixed cans and 8 recycling points for plastics. The recycling points are mainly located in Lerwick/Scalloway; and
- One Household Waste and Recycling Centre (HWRC) at Gremista Waste management facility. Scrap metal and WEEE are collected and recycled. Wood and garden waste are shredded.

Up until now the Council has had to treat the vast majority of the waste it collects at our EfW plant (in addition to importing waste from Orkney and/or Highland). A revised arrangement with the district heating scheme operators is likely to mean that recycling services can be introduced without a detrimental decrease in heat provided by the EfW to the district heating scheme.

Changes proposed to the household waste and recycling services by the Council are:

- Residual waste is likely to be collected fortnightly in sacks/wheelie bins/ 'bruck' boxes. This collection frequency is still under appraisal. Current analysis suggests less frequent collections at the anticipated recycling rate will significantly exceed vehicle capacity. This will be confirmed by October 2017 following 'Collection Efficiency and Practicality' and 'Route and RCV studies in Summer 2017.
- Paper, card, metals and plastics are likely to be collected fortnightly in 240l wheelie bins by new split bodied RCVs. This collection frequency is still under appraisal. Current analysis suggests that, based on the anticipated recycling rate, many refuse collection routes will yield very low tonnages on a fortnightly basis and a less frequent collection may be more efficient. This will be discussed with ZWS and confirmed by October 2017 following 'Collection

Efficiency and Practicality' and 'Route and RCV studies in Summer 2017.

- Waste in Fair Isle, Foula, Papa Stour and Skerries will continue to be collected by a contractor and transported to Lerwick; we will provide additional receptacles/skips in these communities for waste separation into the four waste streams (residual, paper/card, plastic/cans/cartons, glass)
- The Council will continue to operate recycling points for colour mixed glass
- The Household Waste and Recycling Centre (HWRC) at Gremista Waste management facility will continue to collect and recycle scrap metal and WEEE. Wood and garden waste will be shredded. We will continue to collect household recycling at the HWRC bring site.
- A new recycling shed will be built where plastic, cans and cartons will be separated by magnet, eddy current separator and a small picking station before being baled for shipment to the Scottish mainland.
- Paper and cardboard will remain mixed and be baled for shipment to Scottish mainland

Properties included

All 11,000+ properties in Shetland will be included in the service change. However, the collection method and receptacle may vary for some properties and in some areas.

It is anticipated that the majority of properties in Shetland will be provided with a 240l wheelie bin for each of the two kerbside recycling waste streams (plastic/cans/cartons and paper/card) and a recycling box for collection and transportation of glass to bring sites.

We plan detailed feasibility studies of current collection points, routes and fleet over the Summer of 2017 (see 'Service analysis required' below). This will inform the quantity of 240l bins, boxes and communal resources required for the transition.

Unconventional collection points

The geography and climate of the Shetland Islands means the presentation of waste varies greatly between and within communities. Waste is currently presented in waste sacks, wheeled bins, 'bruck' boxes, communal bins or under heavy nets or a combination of all of these methods.

General waste is often stored and/or presented for collection at the edge of a hamlet/dwelling by a household or multiple households. This can often be at the bottom of an inaccessible driveway/track on a road verge or other suitable and available space. Some of these areas have seen formal infrastructure put in place when the number of properties affected has seen fit to do so – but on the whole these are resident chosen ad-hoc collection points. Many of these informal collection points have been set up and maintained at the personal expense of the resident. We intend to deal with these exceptional collection sites as follows:

Council supported local waste collection points – These sites have evolved over time throughout the Isles and have been necessary to establish a workable collection point for multiple households and to ensure service efficiency and ensure lengthy collection routes can be covered by one vehicle in one day. These sites have arisen as a result of a number of issues including difficult terrain, poor/narrow/unable to access a household(s), staff safety, public convenience or simply being the only physical space to present waste (i.e. flats/high density housing).

A significant amount of council investment has already been made to establish these sites and adopting kerbside collection will have a significant effect on time and cost of collection services. As such we propose that any area currently operating a local general waste deposit site will continue, with appropriate numbers of recycling receptacles also being placed at these existing sites.

Informal collection points - Exist mainly in rural areas of Shetland, where geography/access/safety/environmental/service efficiency issues mean this is the only reasonably practicable way for residents to present waste and for our service to collect it. A move away from refuse bags to wheelie bins will have an impact on the viability of many of these sites.

In many cases it would not be reasonable to ask a resident to move a wheelie bin a considerable distance or over cattle grids or rough terrain back and forth to their residence, and it is likely that they simply would not do so. This would risk an adverse effect on recycling activity and/or the receptacles being placed dangerously at these informal collection points.

As such funding will be required to make current informal collection points accessible to the public and collection staff and capable of housing the new receptacles in a safe manner (i.e. receptacles should be housed/tethered appropriately for frequent inclement weather, easily manoeuvrable to collection vehicle, not impinging on roadsides and affecting driver visibility at junctions).

ZWS recognised these complex issues in the options appraisal and suggested: *"further work is needed to understand what recycling container options will be best suited to different property types. Survey work may be needed to understand the current collection approach for individual properties; this information can be used to inform the preferred recycling container(s) option. It will be important to consider the impact of different recycling containers on the productivity (speed) of the collections and therefore the cost of the service."*

As such we will be undertaking a study during Summer 2017 to establish how many properties will require an alternative solution.

Remote Islands - Separate collections will be facilitated even in the most remote island populations. In Fair Isle, Foula, Papa Stour and the Skerries where local collection and a general waste skip transportation scheme operates we will be adding bins/skips for the collection of recyclable materials. We will be contacting people in these communities directly during Summer 2017 to work out a practicable solution for establishing appropriate collection capacity and planning the transportation of the material to Lerwick.

Commercial waste

Waste from commercial premises is mainly co-collected with household waste. The Council is the only waste collector in Shetland and is currently undertaking a review of commercial waste contracts with a view to identifying any premises that do not have a contract, and therefore may be illegally using the household waste collection service.

The proposed new operation will separate all commercial collection from household (possibly with the exception of rural business recycling, where providing a commercial waste refuse collection route for this purpose may not be practical or economically viable). A study of route and RCVs in Summer 2017 will ultimately determine if there is enough waste to justify separate commercial collection routes.

Service cost

The Council has identified a savings requirement of 4.5% year on year for all Council waste and recycling activities. The options appraisal identified a potential reduction in disposal and treatment costs of £24,708 (as per scenario 2a-Med in options appraisal). This is as a result of increased income from the collection and sale of recyclable materials listed in the charter.

This does not include any additional collection costs, replacement or repair costs for new recycling receptacles, or any additional staff time for the planned picking station. As such it may be that there are no savings on current costs.

Potential savings

Following implementation it may be possible to adjust recycling route frequency on rural collection routes. A fortnightly residual and 4 weekly recycling collection may be possible given estimated recycling rates and vehicle capacity. This would require more than 240l capacity for plastic/cans/carton recycling to meet the 70l per week capacity for householders specified in the charter; offering a 46l recycling sack could be a potential solution.

This scenario would significantly reduce collection costs as the geographic areas with the longest routes and lowest waste yield would only be visited three weeks in every four weeks as oppose to weekly.

Given current information a fortnightly recycling collection on existing routes, at anticipated recycling rates, will see vehicles travelling up to 220km in a day for less than 3 tonnes of recyclable material.

We plan to study this during Summer 2017, along with ZWS, in order to avoid inefficient routes where low recycling weights would be collected over large distances. This will involve redrawing some routes based on historical waste data; to ensure we are able to maximise collection and avoid having to revisit areas on a route if vehicle capacity is reached before the end on any given day.

Service analysis is required - Two research projects to take place during Summer 2017

We propose to employ two students on 8 week placements to undertake fieldwork and assist with analysis for both projects.

Study 1 - Collection Efficiency and Practicality:

A feasibility study of existing collection points on all refuse routes will be undertaken in Summer 2017. This research will count and categorise each collection site. This will be with regard to its suitability for wheelie bin recycling collection and identify a suitable alternative if necessary. The study will also anticipate capacity required for communal sites following the implementation of various recycling collection frequencies.

This work will inform the quantity of 240l bins we will need to procure, and the additional capacity required at communal collection points. This will be based on anticipated recycling rates (and future recycling rate improvement). It will also take into account suitability of existing informal collection points and propose the best collection solution for these irregular cases – taking into account collection practicalities and cost.

Study 2 - Route and RCV Efficiency:

A second study will cover route rationalisation and RCV capacity. This study will inform whether any

changes are required to the current RCV fleet. This research will track RCV capacity during collection routes. This will inform any route adjustments that may be necessary in order to achieve balanced route times and tonnages in future.

The study will allow for more accurate service planning and determine the need to adjust the existing fleet. The viability of separate commercial waste routes in rural areas will also form part of the analysis. This work will take into account anticipated recycling rate (and future recycling rate improvement), length of route and anticipated tonnages based on historical data collected by the SIC.

2.2 Has member approval been obtained either in full or in principle to implement the transition?

Member approval has been agreed in principle.

The outcome of negotiations with the district heating scheme operators will be known by June 2017 and the council will be asked to consider both the recycling charter and the future of the EfW plant in July 2017.

Section 3: Costs (where funding is being requested)

3.1 Was the options appraisal completed with support of Zero Waste Scotland?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
-----	-------------------------------------	----	--------------------------

3.2 What is the current baseline annual cost of operating your service (as agreed with ZWS in options appraisal)? List all assumptions as agreed with ZWS and existing capital replacement details.

An overview of the costs associated with the current service baseline is provided in the options appraisal (see below).

A variation of the baseline has been appraised which considers the impact that would be seen if following the sale of the EfW, there was an increase in the EfW gate fee to £55/tonne (assumes no income is received for burnt metal). The analysis suggests that if the gate fee increased to £55/tonne there would be an increased cost of £94,602/year.

Table 3.9 Summary of baseline kerbside service costs

	Current service costs	Variation: Increased EfW gate fee
Collection cost	£711,844	£711,844
Staffing	£453,666	£453,666
Container replacements	£0	£0
Vehicle running & standing	£258,178	£258,178
Disposal/ treatment	£459,570	£554,172
Dry recycling income/cost	£6,733	£6,733
Organics gate fees	£0	£0
Residual waste disposal	£452,837	£547,440
Total revenue	£1,171,414	£1,266,016

The Council has identified a savings requirement of 4.5% year on year; based on the calculated current service costs this is equivalent to approximately £52,714/year*.

*The calculated service costs exclude operation of bring sites, commercial collections and Gremista Recycling Centre and excludes recycling of mineral oils and textiles and footwear.

Table 4.3 Overview of scenarios and variations

Scenario		Performance variation	Current refuse gate fee (a)	Higher refuse gate fee (b)
1	Glass at kerbside	Low Recycling	sc 1a_Low	sc 1b_Low
		Medium Recycling	sc 1a_Med	sc 1b_Med
		High recycling	sc 1a_High	sc 1b_High
2	Glass at bring sites	Low Recycling	sc 2a_Low	sc 2b_Low
		Medium Recycling	sc 2a_Med	sc 2b_Med
		High recycling	sc 2a_High	sc 2b_High

Performance assumptions

As previously described performance assumptions have been informed by Options 3-5 of the BPEO study. It has been assumed that additional recycling is captured directly from the residual waste stream and that there is no change to the overall waste arising. Table 4.4 describes the performance assumptions:

Table 4.4 Performance assumptions

Material collected	Average weight collected (kg/hh/wk) from the kerbside and bring sites			
	Current service	Performance variation		
		Low	Medium	High
Paper & card	-	1.2	1.5	1.8
Metals	0.02	0.2	0.2	0.3
Mixed plastics	0.03	0.2	0.3	0.4
Cartons*	-	0.019	0.024	0.029
Glass – kerbside (Scenario 1)	-	1.0	1.2	1.2
Glass – banks (Scenario 2)**	0.33	0.4	0.45	0.5

* Carton weights were not predicted in the BPEO study and therefore estimates have been based upon weights collected by other local authorities. ** It has been assumed that the Council would expand the network of glass brings sites and therefore that the weight of glass collected would increase slightly.

It has been assumed that contamination of recycling streams is minimal and therefore that 100% of collected material is recycled. Expected recycling rates are shown in Table 4.5:

Table 4.5 Scenario recycling rates

Current service	1_Low	1_Medium	1_High	2_Low	2_Medium	2_High
9.2%	23.1%	26.4%	29.4%	19.8%	22.6%	25.6%

Recycling gate fee/income/haulage assumptions

Table 4.6 describes the assumed destinations, gate fees/incomes and haulage costs for each material stream. To sort material into the streams described in Table 4.6 it is likely that a sorting line is required – this is considered in Chapter 5.

Table 4.6 Recycling outlets

Material	Assumption
Glass	Currently shipped to Viridor. There is no expected change to the quality or composition of material and therefore it is assumed that there is no change to the average income and haulage costs per tonne.
Metals	Metals are currently sold to a local scrap merchants. It is assumed that the increased weights collected at the kerbside will enable the Council to get a better outcome by sorting metals into aluminium and steel streams, baling the two streams and sending them to the mainland. It is assumed that the Council will receive £650/T income for aluminium and £30/tonne income for steel. An example destination for metals is ACE, Alloa (who supply Novellis). It has been assumed that the cost to haul a full load to ACE is £1,283* and that the achievable payload is 20T. It is assumed that the composition of metals is 1/3 aluminium, 2/3 steel.
Mixed plastics	A review of plastics incomes received by other LAs suggests that they are receiving a similar price as Shetland do for plastic bottles. It has therefore been assumed that there is no change to the average income and haulage costs per tonne.
Mixed paper and card	It is assumed that the Council will receive £35/T income for mixed paper and card. An example destination is UPM, North Wales. It has been assumed that the cost to haul a full load to UPM is £1,883 (£1,283 + £600 haulage from the Central Belt to North Wales) and that the achievable payload is 22T**.
Cartons	It is assumed that the Council will pay a £10/T gate fee for cartons. An example destination is ACE, Halifax. It has been assumed that the cost to haul a full load to ACE is £1,883 (£1,283 + £600 haulage from the Central Belt to Halifax) and that the achievable payload is 22T**.

* Estimated haulage cost provided by officers for a shipment from Lerwick to the Central Belt.

** Estimated achievable payload capacity estimated by Falkirk Council (assumes loose material transported in a walking floor artic).

3.3 What is the modelled annual cost of operating the proposed service?

Operating costs associated with collections will be determined following a survey taking place in Summer 2017.

Operating costs associated with treatment and disposals are described in the options appraisal (see table below).

Table 4.7 describes the impact of the recycling gate fee/income and haulage costs described in Table 4.6 plus the saving at the EfW.

Table 4.7 Expected impact on disposal/treatment costs (£46.15/T EfW gate fee)

	Current_a	1a_Low	1a_Med	1a_High	2a_Low	2a_Med	2a_High
Dry recycling income/cost	£6,733	£41,616	£52,282	£57,473	£28,314	£37,162	£42,188
Organics gate fees	£0	£0	£0	£0	£0	£0	£0
Residual waste disposal	£452,837	£393,952	£379,034	£365,136	£410,374	£397,700	£384,006
Disposal/treatment	£459,570	£435,568	£431,316	£422,610	£438,688	£434,862	£426,195
Variation from current	N/A	-£24,002	-£28,254	-£36,960	-£20,882	-£24,708	-£33,375

3.4 If any of your existing vehicles will not be required to deliver the new service please explain what will happen to these vehicles.

It is anticipated that the number of vehicles required to operate the service will not reduce, however this will be confirmed following a survey in Summer 2017

This study is necessary as an RCV currently visits each Shetland property four times in four weeks. Using our current fleet we would be required to visit each property six times over the same four week period collecting one waste stream at a time.

Operating a three weekly cycle using existing vehicles may lead to issues with RCV capacity under anticipated recycling rates. A three weekly recycling collection for each stream may also lead to large RCVs collecting small quantities over vast distances and long operating hours.

As such three split bodied RCVs (including one spare) may be required for recycling collection to avoid a significant increase in operational costs.

Our current fleet consists of six HGV and two 7.5T RCVs. It is anticipated that the new service may require three of the HGV vehicles to be replaced with split bodied vehicles of a similar capacity.

3.5 If you own (rather than lease) vehicles please explain when they are due to be replaced via the Council's vehicle replacement programme.				
Vehicle Type	Date of purchase	Lifespan (years)	Proposal for replacement	Date of replacement
Potential for HGV x3			Split bodied HGV X3	This will be determined by Summer 2017 Route and RCV study

3.6 Please complete the table to detail the one off capital transition costs and funding requested to implement the proposed new service excluding existing vehicle replacements.				
Year of Expenditure	Item	Quantity	Unit Cost (excl VAT)	Total Cost (excl VAT)
2017/18	240l Wheelie bins	22,420 (minus local collection point properties etc)	£22	<£493,240
2017/18	Recycling box (glass storage and transport to bring site?)	11,210 (plus additional boxes for properties with local collection points – flats, dense housing)	£5	>£56,050
2017/18	Recycling shed (30m x 20m)	1	£485,000	£485,000
2017/18	Hopper	1	£20,000	£20,000
2017/18	Conveyors – 10m		£20,000	£20,000
2017/18	Magnet	1	£15,000	£15,000
2017/18	Picking station	2	£45,000	£90,000
2017/18	Baler	1	£75,000	£75,000
2017/18	Eddy current separator	1	£57,500	£57,500
2017/18	Can baler	1	£35,000	£35,000
2017/18	Informal collection point infrastructure (i.e. where wheelie bin not appropriate due to collection point location/accessibility/safety)	Determined by study Summer 2017	£1,000	Determined by study Summer 2017

2017/18	Adding recycling receptacles to SIC Local waste collection points (for areas currently operating a general waste local bring site e.g. high density housing and flats)	Determined by study Summer 2017	£1500-2000	Determined by study Summer 2017
2017/18	Cost of replacing HGV with split bodied HGV	Determined by study Summer 2017	£43,000+ = difference new to new	Determined by study Summer 2017
2017/18	Additional implementation costs (transport of materials/plant from Mainland, installation + made ready for operation e.g. travel for suppliers)	1	Estimated £5000	Estimated £5000

3.7 Please complete the table to detail the one off implementation costs (project management, communications, temporary staff, staff training) and funding requested to implement the proposed new service?				
Year of Expenditure	Item	Quantity	Unit Cost (excl VAT)	Total Cost (excl VAT)
2017/18	Communications (e.g. letters & leaflets)	11,210	£1.20	£13,452.00
2017/18	Internal resources	11,210	£0.50	£5,605.00
2017/18	Frontline staff training	11,210	£0.15	£1,681.50
2017/18	Temporary staff for studies – Student Summer Placements	2	£4000	£8000
2017/18	Product testing + shipping (test applicability for collection/ environment/ climate)	1	£2000	£2000

3.8 Where the costs in 3.4 and 3.5 vary from those agreed with Zero Waste Scotland in the options appraisal, please explain the variation?
It is not yet known if the costs will vary from the options appraisal. This will be determined following 'Route and RCV Efficiency' research is conducted in Summer 2017.

Section 4: Materials

4.1 Please describe the expected impact on the quantity (tonnes) and quality of materials collected for recycling compared to the existing baseline and state the expected recycling rate (%) once the new service is fully implemented.

- **Recycling rates are expected to increase to c. 20-27% from current 8-10%**
- It is estimated that approximately 224 – 387T of mixed plastics, cans and cartons will be sorted per year

Glass: There is no expected change to the quality or composition of material and therefore it is assumed that there is no change to the average income and haulage costs per tonne.

Metals: Currently sold to a local scrap merchants. It is assumed that the increased weights collected at the kerbside will enable the Council to get a better outcome by sorting metals into aluminium and steel streams, baling the two streams and sending them to the mainland.

Mixed plastics and cartons:. There is no change to the average income and haulage costs per tonne for **plastic** compared to the existing baseline. It is assumed that the Council will pay a £10/T gate fee for **cartons**, there is no current collection or sorting of cartons.

4.2 Please describe your proposed method of separation of the collected streams e.g. at kerbside, own facility, merchant facility etc.

Plastic and cans : New recycling shed (picking station, magnet, eddy current separator)

Paper and card : no separation (baled mixed and shipped)

Glass: no colour separation

Section 5: Implementation

5.1 Please breakdown your planned implementation and high level timeline by year and financial quarter incorporating the following;

- **Member approval (where required)**
- **Project Management**
- **Procurement (including lead times)**
- **Human Resources (including temporary staff)**
- **Communications**
- **Training (existing, temporary and new staff as appropriate)**

Year	Quarter	Activities

2017	1	
	2	<ul style="list-style-type: none"> - Submit Transition Plan - Communication Strategy Development - Procurement Planning - Study Methodology + Student Recruitment
	3	<ul style="list-style-type: none"> - Collection Efficiency and Practicality Study - Route and RCV Study - Communication Strategy (Phase 1: Community Engagement, SIC Council Approval)
	4	<ul style="list-style-type: none"> - Communication Strategy (Phase 2: Staff Training, Community Council Engagement) - Potential small scale pilot recycling collection in selected areas
2018	1	<ul style="list-style-type: none"> - Procurement (plant, vehicles) - Communication Strategy (Phase 3: Service Information to Public)
	2	<ul style="list-style-type: none"> - Purchasing (plant, vehicles)
	3	<ul style="list-style-type: none"> - Phased roll out: Dependent on availability of resources
	4	<ul style="list-style-type: none"> - Phased roll out: Dependent on availability of resources
2019	1	<ul style="list-style-type: none"> - Phased roll out: Dependent on availability of resources
	2	<ul style="list-style-type: none"> - Phased roll out: Dependent on availability of resources
	3	<ul style="list-style-type: none"> - Phased roll out: Dependent on availability of resources
	4	<ul style="list-style-type: none"> - Full recycling service active
2020	1	
	2	<ul style="list-style-type: none"> - Service Evaluation Study (Revise routes, assess fleet requirements, public feedback survey)
	3	
	4	
2021	1	
	2	
	3	
	4	

Section 6: Declaration

I declare that:

The information given on this form and in any other documentation is accurate to the best of my knowledge.


I understand that, where any materially misleading statements (whether deliberate or accidental) are given at any stage during the application process, or where any material information is knowingly withheld, this could (at the discretion of Zero Waste Scotland) render my application invalid and any funds received by us will be liable for repayment.

I confirm that my organisation will take all reasonable precautions to ensure that any funding received will not be misused or misappropriated in any way. In the event of a fraud, I understand that Zero Waste Scotland may take legal action to recover any misappropriated funds.


I confirm that the project would not proceed in the absence of this grant and no other grants are available to the Council to fund the project. Any co-funding must be provided by the Council.

I agree that the information supplied on this form, including individual contact information, will be used to chart the success of the project and for Zero Waste Scotland monitoring purposes.

To be signed by person completing this form

Signed:	
Print Name:	William Spence
Position:	Executive Manager – Environmental Services
Name of Council:	Shetland Islands Council
Date:	27/04/2017

To be signed by a Senior Manager (for example Head of Service, Director)

Signed:	
Print Name:	Maggie Sandison
Position:	Director – Infrastructure Services
Contact email address and phone number	Environmental Services, Infrastructure Services Department, Shetland Islands Council, Gremista, Lerwick, Shetland. ZE1 0PX 01595 74 4851
Date:	27/04/2017

Section 7: Supplementary Information

7.1 If you have any other relevant information you would like to add to support your proposal, please include it here and list any attachments submitted in support of your application.

The adoption of the recycling charter would represent a step change for waste collection in Shetland and will require a significant amount of work to challenge current attitudes and behaviours with regard to recycling in our remote community of islands. The gap between the Shetland and Scottish average recycling rate has been increasing year on year and the SIC are keen to close this as soon as possible.

In Shetland we face obvious geographic issues and associated financial costs (e.g. onward transportation costs and high cost per tonne of rural waste collection). So planning an efficient and cost effective service is complex. We also face extreme environmental issues by Scottish standards - fewer than 6 hours of daylight in Winter and high wind speeds throughout the year on a very exposed landmass.

We feel it is important that a new refuse and recycling collection service incorporates/builds on local 'Shetland proof' solutions where appropriate; from both a practical point of view and to increase public buy-in for recycling. It is probable that any proposed changes will be subject to significant public scrutiny, and much scepticism, especially if the service planned does not account for specific local conditions and include necessary practical adjustments. This fact, coupled with the convenience of being able to place all refuse in one bag on a weekly basis, means the behavioural change aspect of this transition may be particularly difficult and ZWS communication support will be crucial.

We hope that these legacy issues/peculiarities of Shetland waste collection have been adequately explained in this document and the accompanying ZWS options appraisal. At a time of increasing budget pressures it is fair to say that this ZWS support would be critical in helping Shetland Islands Council achieve a comparable recycling rate to other Scottish local authorities.