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REGIONAL BOARD REPORT

Subject: Sustainability Strategy Mid Year Update	**Purpose:** **For Approval** ☐ **For Discussion** ☒ **For Information** ☐
Prepared by: Hazel Robertson, Vice Principal Finance and Corporate Services	**Date:** 22 November 2021

Purpose:
To provide members with a mid year overview of activity in relation to Sustainability

Linked to Strategic Ambition: Take a leading role in enabling an inclusive, resilient and sustainable Scotland

Performance Measures: Recognised as national leaders in sustainable practice

Linked to Strategic Risk Register: New Risk (outwith themes)

New Risk Commentary: I will discuss with Board Secretary, could fit into an overarching risk around Board governance arrangements

Executive Summary:

Our Sustainability Strategy sets out how the climate emergency has redefined sustainability, taking it from a component of corporate social responsibility, escalating it to become a leadership essential, to be placed at the heart of all of our plans. This strategy is our opportunity to continue our journey from good to great. We will demonstrate the importance of moving towards a more sustainable society through our work as an instigator of behavioural change, ensure relevance and impact on a global scale by committing to the circular economy and developing our staff and students to become global citizens.

Borders College is committed to working towards a more sustainable world, and over the last ten years has implemented big projects and little actions, which together have resulted in a significant reduction in our carbon emissions. Borders College continues on this sustainability journey, with net-zero by 2045 as the ultimate destination. Our strategic objectives are:

- Influence positive, sustainable behaviours across the wider community
- Develop awareness of, and implement, good sustainable practice in all of our learning programmes
- Promote sustainable innovation and the adoption of technological breakthroughs with our employers and students
- Adopt best ethical, sustainable and social practice in our operations and supply chain.

We have organised our sustainability work across eight workstreams:

1. Carbon management
2. Waste management
3. Travel and transport
4. Procurement
5. Curriculum
6. Community

7. Biodiversity
8. Behavioural.

The attached report represents the first semi-annual report to the Board, the next report will be towards the end of the academic year. A broad range of activity has been undertaken to date and we have been able to fund some of these works through the capital receipt for Melrose Road. We anticipate the new EAUC shared post will support us to access other funding streams.

Recommendation:
Members to note significant progress against the workstreams including our facilities and support functions, curricular, biodiversity and community oriented skills delivery.

Previous Committee Approvals:
None

For publication ☒	**For publication with redactions** ☐	**Not for publication** ☐

SUSTAINABILITY STRATEGY IMPMENTATION
REPORT TO REGIONAL BOARD: 2 DECEMBER 2021

Introduction

The Public Sector Report on Compliance with Climate Change Duties 2021 is an annual report, it has been reviewed in draft by the Finance and General Purposes Committee. It has been subject to peer review by the Environmental Association for Universities and Colleges (EAUC) and some minor changes made. The Borders College has been submitted by 30 November.

The Sustainability Strategy identified eight workstreams of activity:

1. Carbon management
2. Waste management
3. Travel and transport
4. Procurement
5. Curriculum
6. Community
7. Biodiversity
8. Behavioural

The Central & South of Scotland College Partnership has successfully appointed to a cross College sector role hosted by EAUC to commence in January 2022. This is a 2-year fixed term post to support Borders College, West Lothian College & Forth Valley Colleges on the road to Net Zero, the post holder will focus of completing the FE road map for all 3 colleges and working to secure grant funding through the Non-Domestic Energy Efficiency Fund (NDEEF) in decarbonising the College estate.

CARBON MANAGEMENT

1. SHARC

Increased output, shy of 1m KW hours. Heat output has surpassed gas usage for the first time. Phase 2 SHARC – infrastructure, insulation, adopting further technologies.

2. *Hawick* Campus Improvements

A review of the Hawick Campus was undertaken during the summer months. This was concluded in September and a number of carbon efficiency improvements were identified.

Phase 1 started in October, as we started work to improve the **lighting** and **insulation**.

- **Lighting**
  Hawick Campus lighting is a mixture of LEDs, T5s and Halogen. By replacing the old type lighting with new equivalents, we will reduce energy consumption from 9774 kwhr down to 3235 kwhr. The retrofit of lighting costs £7,555. In addition to the carbon efficiencies, the reduced energy usage is expected to deliver an annual saving of £1,000 in electricity costs.

- **Insulation**
  Hawick Campus lacks quality insulation with large areas of open ceiling exposing large section of the ceiling deck creating significant heat loss during the course of a year. Work commenced in November to suspend ceilings and provide high-quality insulation to mitigate heat loss. The cost to this work is £9,000.

Phase 1 work is on target to complete by end of December 2021. **Phase 2** will commence in January 2022. We will begin work to improve the **heating, solar PV** and **controls.** We aim to complete this work by end of July 2022.

- **Heating**
  The installation of air source heat pumps within the workshop creates the opportunity to provide heat for a proportion of the building. The heat network can be divided in to three distinct areas, two manifolds provide underfloor heating for the ground floor whilst the first floor is heating by wall mounted radiators.

  In January, we will commence work to connect the workshop heat pump to a ground floor manifold. We will also procure and install another two air source heat pumps. These will be strategically located within the building to supply heat to the remaining ground floor network and first floor network. The cost is estimated at £30k. The changes will negate the need for gas fired heating.

- **Solar PV / Thermal**
  Hawick Campus has sufficient room to install additional solar PV/thermal on the Campus roof, providing a power supply to run the heat pumps. Further analysis is being undertaken to establish exact demands and supply levels and whether further battery storage is required. The cost is estimated at £20,000.

- **Controls**
  Hawick Campus currently has no ability to manage set points, time clocks and integrate alarms from afar. Integrating new controls with the BMS based in Galashiels would enable greater visibility of activities and minimise energy loss through greater control and ability to react. The cost is estimated at £10,000.

WASTE MANAGEMENT

1. IBC procurement

Intermediate bulk containers (IBC) are industrial-grade containers engineered for the mass handling, transport, and storage of liquids, semi-solids, pastes, or solids. The two main categories of IBC tanks are flexible IBCs and rigid IBCs. IBCs are reusable, allowing cleaning and multiple uses.

In September 2021, Borders College replaced over 95% of the cleaning products used to one single product, and procured IBC for product storage. Borders College procured 1000 litres for IBC at a cost of less than £5000. The IBC product dilutes to 23k litres of cleaning products, providing sufficient cleaning products for the next 5-year period. The diluted product is stored in existing containers, further reducing waste. By making this simple change, we not only reduced our waste margin, but also the College's carbon footprint and create a financial annual saving is £5,000.

**during non Covid-19 time*	**Annual waste produced*	**5-year waste produced*	*Annual waste produced*	*5-year waste produced*
	Several cleaning chemicals		*Single product*	
Waste plastic containers	4308	21,540	0	0
Waste cardboard boxes	822	4,110	0	0
Wooden pallets	24	120	0	0
Deliveries – monthly	24	120	0	0

2. Waste Audit

A waste management audit has been carried out. The audit incorporated all Borders College campuses and Heriot Watt, capturing the waste streams, disposal methods, volume of waste and the financial costs associated with waste disposal.

The waste management audit results have been reviewed by the Waste Management working group. A proposal to complete a tender exercise prior to our existing waste contract expiring in Summer 2022 will be presented to Senior Leadership Team and Campus Management Committee approval.

The focus for the tender will be on identifying and appointing a waste contractor who can fulfil our zero to landfill ambitions, at the same time continue to focus on procurement of products to identify and mitigate high volumes of procured waste.

SUSTAINABLE TRAVEL & TRANSPORT

A Sustainable Travel plan has been created to support a drive towards Net Zero by 2040. Six key actions are outlined in the Travel Plan.

1. Replace College car fleet with EV/Hybrid alternatives

The current fleet contract ends in October 2022. Internal funding has been agreed to replace the College car fleet with EV/Hybrid alternatives. We are currently evaluating the options with a view to placing an order early 2022, and the replacement fleet to be available for use in July 2022.

2. Increase EV charging posts across the estate

Funding is being applied for through Energy Savings Trust to increase the number of EV charging posts across the estate by adding five double posts. One double charging post will be installed in Newtown St Boswells; and four added to the Scottish Borders Campus in Galashiels (2 for fleet use, and 2 for staff/student use). The intention is to have all additional charging posts installed by Summer 2022.

Discussions with Scottish Borders Council are also taking place to determine a potential wider scale charging infrastructure which may impact on Borders College plans

3. Free bus travel for Under 22s

All residents in Scotland under the age of 22 will be eligible for free bus travel from **31 January 2022**. The Scottish Government has confirmed the timetable for the roll out of the scheme, delivered in partnership with the Improvement Service, the National Entitlement Card Programme Office and Young Scot.

A plan is being created to promote the Free Bus Travel for Under 22's. National promotional material, once received, will be used. Promotion is expected to commence in **January 2022**.

4. Promote walking and cycling to work

The College currently has facilities that are significantly underutilised in relation to walking and cycling. We are developing a plan to promote the facilities and encourage more students and staff to walk or cycle to work where possible.

5. Improve e-cycling charging infrastructure across the Borders.

Borders College is in discussion with Scottish Borders Council to improve e-cycling charging infrastructure. SBC is exploring funding opportunities to support this. Discussions are at very early stage.

6. Replace Minibus fleet with sustainable alternatives

Borders College is in discussion with SBC on potential resource sharing of minibus fleet and replacing fleet with sustainable alternatives. Discussions are at a very early stage.

PROCUREMENT

The Procurement workstream aims to develop and provide an environmentally and financially sustainable procurement system for Borders College, in collaboration with the strategic working groups and leveraging support across our stakeholder partnerships. Our vision is to lead sustainable excellence in our supply chain, within the College functions and beyond, influencing our external environment and encouraging the circular economy.

The workstream group is established, with internal representation from Procurement, Finance, Facilities and also APUC (Advanced Procurement for Universities and Colleges). The first meeting has taken place in mid-November, and explored the requirements for providing an environmentally and financially sustainable procurement system for Borders College.

CURRICULUM

In September, we introduced two new student courses.

- Mechanical Ventilation with Heat Recovery (MVHR) focuses on the installation of energy efficient heating system. The staff member has just completed the training and is developing the delivery programme. This course will be incorporated in to the associated curriculum area, with both full time and apprentice students taking part, this will make up part of the Sustainable Construction Awareness short course.

- Renewables – Air Source and Ground Source installation has taken place and is part of the plumbing framework aiming to train and upskill plumbing students. We are in the middle of BPEC approval for this and we have an approval visit on the 18th November with our first course planned for the 22nd November which will consist of nine apprentices. The course will then be offered as a commercial course.

Working with the Verdancy Group, three new online training modules have been developed - two for students and one for staff.

- "**Climate change**" is a student-based course, as an introduction to net zero 2045. This was launched in September as part of Induction, and to date all students across the curriculum are working on this.

- "**Sustainability and me**" is designed to follow on from "Climate Change" given its focus on what we can do as individuals and the differences we can make with our simple everyday life choices. This was launched in November at the beginning of COP26, and to date all students across the curriculum are working on this.

- "**Our Sustainability Journey**" is a staff-based course. This course focusses on our Sustainability Strategy and is a reminder of the journey that we are on and the importance of promoting behavioural change amongst our students and staff. This has not yet been launched.

The student courses have been shared with CLMs, and will be discussed at individual staff reviews. All students and staff are encouraged to participate in these modules.

These courses have been highlighted in The Herald in an article by The Verdancy Group The Verdancy Group proves knowledge is power in an era of change | HeraldScotland .

At present we cannot quantify student engagement on Moodle until they have completed modules in their entirety. This will change when we make the transition over to Canvas (the new virtual learning environment).

We will continue to promote these new modules as we go through the year but staff have been given targets at their review to engage students on to these especially the "Sustainability and Me" as the student gives a commitment as to what they will do to help reach Net Zero at the end of the course.

COMMUNITY

1. Modern apprentice e-portfolios

In August 2021, Borders College Enterprise & Innovation launched a new e-portfolio system, Smart Assessor. Smart Assessor is an electronic collection of a student's skills and knowledge, and replaces paper portfolios.

E-portfolios are used by all vocational students undertaking VQs, in conjunction with remote learning. This is currently 490 students.

The additional benefits to remote learning and e-portfolios include a reduction in travel, resulting in reduced costs and creating a positive impact on the environment.

2. Flexible workforce - sustainability and green energy courses

A number of sustainability and green energy courses are being planned/delivered.

EV charging installation course was delivered in September with four participants. In October, we delivered the AS/GS Heat Pumps course. This attracted four participants. Courses are run as required based on employer need.

The following courses are in development and will be available based on employer need:

- Energy Battery Storage Awareness
- Intro to Digital Smart Homes
- Intro to Sustainable Construction
- Intro to Thermal Imaging
- Intro to Air Tightness and Air Tight Testing
- Intro to MHVR
- Renewables awareness.

3. Online courses related to natural capital & sustainability

Natural Skin Care *(sustainable, environment friendly products)* was delivered last session, with six participants attending the online course.

A number of new online courses have been designed and being delivered between October and December 2021.

Bee Keeping was delivered over a six-week period during October and November. The course provided students with the essential background information required to become a successful bee keeper. 11 participants attended the online course.

Introduction to Astronomy & Astrophotography runs over an eight-week between October and December 2021. 12 participants.

Gardening in Any Space is a 10-week course, looking at different aspect of creating a green space indoors or outdoors. 10 participants.

Climate Change – An Introduction into the current topic of climate change has recently been advertised. The course is scheduled to take place in December 2021.

BIODIVERSITY

1. Bees and biodiversity

Bee-keeping on site at Newtown is expanding, and bee-keeping being incorporated into current courses where relevant.

Bee box and biodiversity projects are underway too, with habitat assessments and biodiversity activities being recorded qualitatively but not currently quantitately. Composting is being considered, however costs are significant for large capacity 'rocket' type units.

2. Rural short courses expansion

Planning is underway to expand the current provision to focus on biodiversity and conservation. We have engaged with stakeholders, including Lantra Scotland, to establish the requirements.

3. Facilities

As part of the campus facility renewal, a space has been allocated to students to develop. The development links with bees and wildflower plantings, and will use recycled materials in structures where possible. Cross-curricular activities has allowed agricultural students to support wildflower planting activities on the farmland used for student practical coursework.

4. Outreach work

Newtown staff hosted a Primary school holiday club in August, focussing on the range of rural skills including a focus on non-native species. We are currently in discussion with DYW Borders regarding a rural taster day in 2022. Tree planning activity is being planned to expand across the College. Borders Forest Trust have limited native tree stock, and we are currently exploring other options

5. Curricular development across RSK courses

Curricular development across RSK courses is underway to refresh and add conservation and biodiversity activities.

- Agriculture and Environment unit for modern agricultural level 5 students
- NC animal care group work placement on conservation
- HND animal care unit on ecology and ecosystems, delivery to students commenced in October 2021, and will be assessed by January 2022.

Future plans include the development of new units and adaptation of some existing units to focus on conservation. Course structures will be adapted, for example to focus on ecology and ecosystems.

Work placements will have a focus on biodiversity and conservation where possible eg group conservation work carried out by students. There will be a focus on biodiversity and sustainability across wider activities, for example wildflower and tree planting.

Pesticides use unit will be removed from full time level 5 agriculture framework. Responsible use of pesticides continues to be taught as a short course (statutory training)

BEHAVIOURAL CHANGE

Behavioural Change workstream is currently supporting the work of other workstreams and projects. Several projects underway or delivered will begin to influence positive, sustainable behaviours across the wider community. We will engage with the new appointee to the Central & South of Scotland College Partnership role to better understand way to measure the behavioural changes across students, staff and the wider community.

1. Home Working

Some immediate behavioural changes have been influenced by alternative working practices as a result of the Covid pandemic. Improved IT connectivity and remote working capabilities has created a better experience for those working or studying from home. The rollout of Office 365 and the increased use of Teams and SharePoint has also influenced our behaviours. Most meetings are now hosted online meetings rather than face to face significantly reducing travel.

As a result, there has been a reduction in unnecessary travel and transport as many staff and students have continued to work or learn from home. There is also a substantial reduction in printing.

2. Student Loan Laptops

Borders College loans laptops to students at the start of each academic year. A process review is underway to look at improving the re-provisioning of the laptops on an ongoing basis, making the process more sustainable and reducing any unnecessary purchasing of additional laptops.

3. Blind Date with a Book

The Campus Library will soon be launching “Blind Date with A Book”. This is an easy, no-cost method for staff and students to contribute to sustainability. Staff and students will donate unwanted novels. These will be wrapped in brown recycled paper, with a few key words or a review on the outside, then placed under the Christmas tree for students and staff.

As well as recycling novels, it can be a fun way to discover something new or read outside the comfort zone for the reader. We need donated novels to make this a success. If the Christmas event is successful, we will plan another Blind Date with A Book event on Valentine’s Day.

4. Influencing behaviours

At the last Sustainability Committee a wealth of ideas were generated to encourage staff and students to make small changes in their own lives to reduce waste, reuse unwanted items and make sustainable decisions.