

REPORT TO SUSTAINABILITY COMMITTEE – 14 SEPTEMBER 2022

CARBON BUDGET UPDATE 2022-2023

1 Executive Summary/Recommendations

1.1 The report presents an update to the Sustainability Committee on progress to date towards the actions listed in Carbon Budget 2022-2023 which was agreed by Aberdeenshire Council 9 March 2022 ([Item 7](#)).

1.2 Recommendations

The Committee is recommended to:

1.2.1 Consider and comment on the Carbon Budget six-monthly update as attached in Appendix 2; and

1.2.2 Note the ongoing responsibility of each Director to secure their reduction targets as set out in the Carbon Budget, and to report progress at six-monthly intervals to the relevant Policy Committees and to the Sustainability Committee.

2 Decision-Making Route

2.1 On 9 March 2022 ([Item 7](#)) a total Carbon Budget for 2022-2023 was set as 47,383 tonnes Carbon Dioxide Equivalent (CO₂e) by Aberdeenshire Council in line with linear progression towards a 75% reduction in Council owned emissions by 2030. A list of CO₂e reduction measures was presented at this meeting to support the Council in reaching its Carbon Budget for the year. At the same meeting, it was agreed that all Directors were required to submit six-monthly updates on in-year progress in relation to these reduction measures to their relevant Policy Committees and additionally to the Sustainability Committee.

2.2 This report contains the progress update that was provided by officers from each Directorate. **Appendix 1** contains the agreed Carbon Budget for 2022-2023 and **Appendix 2** contains the progress update on each of the actions listed.

2.3 In addition to the Carbon Budget 2022-2023 being agreed on 9 March 2022, the responsibility for developing and delivering feasibility studies was delegated to the Director of Environment and Infrastructure Services. A budget of £500,000 was approved for spend to support the further development of the Route Map to 2030 and Beyond through necessary feasibility work on a cross section of the Council's operational buildings. An update on progress to date is provided in paragraph 3.2 overleaf.

3 Discussion

3.1 Provided in the progress update within **Appendix 2** are a number of challenges raised by officers:

- 1) Continued supply chain issues;
- 2) Budget constraints; and
- 3) Capacity challenges across the organisation.

3.2 A scope has been agreed for necessary feasibility work on a cross section of the Council's operational buildings to support the further development of the Route Map 2030 and Beyond, and the Carbon Budget Toolkit which has been developed to support impacts of emission reduction projects on the financial budgets. This scope includes working with consultants to review current activities, agree sites and the scope of assessments required for each before commissioning the studies. The results will support identifying actions and costs for future carbon budget projects and will update the Carbon Budget Toolkit with latest data available making the assumptions behind the tool more rigorous.

3.3 In addition to the actions listed in the Carbon Budget 2022-2023, work is also underway on a number of different projects. This includes the continued identification of funding opportunities to support Aberdeenshire Council in reaching its emission reduction targets, and some examples are set out below:

- 1) The development of Aberdeenshire's Local Heat and Energy Efficiency Strategy (LHEES). Stages 1 - 4 of the methodology was completed with consultant support in April 2022 funded through a grant from Scottish Government. A further annual budget to Local Authorities has been agreed by the Scottish Government of £75,000 per year for 2022/23 up to 2027/28. By December 2023 the Council is to have in place a strategy and delivery programme. This work will have a positive impact on future Carbon Budgets as it includes Council buildings.
- 2) A grant through the Local Authority Covid Economic Recovery (LACER) fund of £35,000 was awarded to the Sustainability and Climate Change team to take forward an Aberdeenshire Heat Decarbonisation Supply Chain and Skills Feasibility study. This study will engage consultants to identify across the North East region what the potential supply chain demand and skills development opportunities are, in order to decarbonise heat and drive down energy consumption from Public Sector buildings in the region no later than 2038. Engagement with Skills Development Scotland and Economic Development officers has been key in developing the scope of the project.
- 3) A number of Expression of Interests (EoI) went in for the Just Transition Fund deadline of the 15 July 2022. Successful EoIs have not yet been announced at time of publication of this report.

- 4) The Sustainability Champions programme has been rolled out with the first training session taking place on 7 September 2022.
- 5) Climate Ready Aberdeenshire draft strategy continues to be developed after a number of successful themed working group meetings took place over the past few months.

4 Council Priorities, Implications and Risk

- 4.1 This Report helps deliver all of the Council’s Strategic Priorities under the three Pillars by embedding the key principle of ‘climate and sustainability’ across Aberdeenshire Council.

Pillar	Priority
Our People	<ul style="list-style-type: none"> • Education • Health & Wellbeing
Our Environment	<ul style="list-style-type: none"> • Infrastructure • Resilient Communities
Our Economy	<ul style="list-style-type: none"> • Economy & Enterprise • Estate Modernisation

- 4.2 The table below shows whether risks and implications apply if the recommendations are agreed.

Subject	Yes	No	N/A
Financial			X
Staffing			X
Equalities and Fairer Duty Scotland			X
Children and Young People’s Rights and Wellbeing			X
Climate Change and Sustainability			X
Health and Wellbeing			X
Town Centre First			X

- 4.3 There are no direct staffing or financial implications arising from this Carbon Budget update monitoring report.
- 4.4 The screening section as part of Stage One of the Integrated Impact Assessment (IIA) process has not identified the requirement for any further detailed assessments to be undertaken. An IIA is not required as there are no direct implications of considering this update as it is a performance monitoring report. An IIA was completed for the Carbon Budget 2022-2023 which was approved by Aberdeenshire Council 9 March 2022 (Item 7).
- 4.5 The following Risks in the Corporate Risk Register have been identified as relevant to this matter on a Corporate Level. However it is acknowledged that working towards a 75% reduction in Council owned emissions has the potential to impact upon any number of areas across the Council risk portfolio.

- Risk ID ACORP010 as it relates to environmental challenges; and
- Risk ID ACORP006 as it relates to reputation management.

The following Risk in the Directorate Risk Registers has been identified as relevant to this matter on a Strategic Level:

- Risk ID ISSR010 as it relates to Climate Change.

The above risks could be mitigated against with sufficient communication and engagement on the progress Aberdeenshire Council is making with regards to climate change mitigation and adaptation beyond the Carbon Budget.

5 Scheme of Governance

- 5.1 The Head of Finance and Monitoring Officer within Business Services have been consulted in the preparation of this Report and their comments are incorporated within the Report. They are satisfied that the Report complies with the Scheme of Governance and relevant legislation.
- 5.2 The Committee is able to consider this item in terms of Section R paragraphs 1.1a and 1.1c of the List of Committee Powers in Part 2A of the Scheme of Governance as it relates to approving, reviewing and monitoring the Council's work in respect of sustainable development and climate change and, also to promote awareness of the need for sustainability within the Council.

Alan Wood
Director of Environment and Infrastructure Services

Report prepared by Claudia Cowie, Team Leader Sustainability and Climate Change
Date: 31 August 2022

List of Appendices:

Appendix 1 - Carbon Budget 2022-23, Identified Costs and Financial Budget Lines
Appendix 2 - Carbon Budget 2022-23 Progress Update

Appendix 1. Carbon Budget 2022-2023, Identified Costs and Financial Budget Lines

Table 1: Carbon Budget 2022-2023	Proposed Identified CO ₂ e Savings (tonnes) 2022-23
BUSINESS SERVICES	
LED Lighting	207
EC Fan	13
Pipework insulation	37
Solar PV	62
BMS	27
Business Services Total	346
ENVIRONMENT & INFRASTRUCTURE SERVICES	
Introduce/trial more electric landscaping equipment	TBD
Roads Resurfacing – Warm Mix	220
Energy from Waste	98
LED street lighting	228
Warp-It	3
Environment & Infrastructure Services Total	549
EDUCATION AND CHILDREN SERVICE	
Energy Sparks	34
Improved Recycling/Composting	16
Education & Children Services Total	50
HEALTH & SOCIAL CARE PARTNERSHIP	
Reduction in business miles	TBD
Resources and Circular Economy Frameworks	TBD
Health & Social Care Partnership Total	TBD
Grid Decarbonisation	500
Total Reductions Identified (tCO₂e)	1445

*TBD = Data to be determined for tCO₂e savings

Table 2: Carbon Budget 2022-2023 Indicative Costs and Financial Budget Lines from initial study work

The details in this table are subject to further consideration by officers but give an indication of the types of interventions being developed, the potential carbon reduction and the scale of investment required.

Interventions	Asset name	Carbon saving (tCO2e)	Capital expenditure (£)	Annual cost saving (£)	Budget	Budget line
LED Lighting	Banff Academy & Banff Swimming Pool	35	134,893	21,687	Capital	Carbon reduction
EC Fan	Banff Academy & Banff Swimming Pool (Deveron Centre)	9	9,598	5,827	Capital	Carbon reduction
LED Lighting	Mackie Academy	53	213,126	33,311	Capital	Carbon reduction
Pipework insulation	Mackie Academy	4	7,371	586	Capital	Carbon reduction
Solar PV	Mackie Academy	27	176,956	16,859	Capital	Carbon reduction
LED Lighting	Fraserburgh Academy	18	98,545	11,129	Capital	Carbon reduction
BMS	Fraserburgh Academy	17	110,646	5,022	Capital	Carbon reduction
EC fan	Fraserburgh Academy	1	14,598	822	Capital	Carbon reduction
Pipework insulation	Fraserburgh Academy	8	15,473	1,219	Capital	Carbon reduction
Solar PV	Fraserburgh Academy	19	126,455	11,603	Capital	Carbon reduction
LED Lighting	Mintlaw Academy	35	108,964	21,622	Capital	Carbon reduction

Interventions	Asset name	Carbon saving (tCO2e)	Capital expenditure (£)	Annual cost saving (£)	Budget	Budget line
EC Fan	Mintlaw Academy	2	9,598	1,500	Capital	Carbon reduction
Pipework insulation	Mintlaw Academy	4	8,961	703	Capital	Carbon reduction
Solar PV	Mintlaw Academy	16	102,265	9,701	Capital	Carbon reduction
LED Lighting	The Gordon Schools	17	89,964	10,640	Capital	Carbon reduction
Pipework insulation	The Gordon Schools	9	17,736	1,407	Capital	Carbon reduction
LED Lighting	Westhill Academy	25	98,814	15,450	Capital	Carbon reduction
Pipework insulation	Westhill Academy	2	4,558	352	Capital	Carbon reduction
LED Lighting	Turriff Academy	13	75,886	7,924	Capital	Carbon reduction
BMS	Turriff Academy	10	12,906	2,663	Capital	Carbon reduction
Pipework insulation	Turriff Academy	1	1,469	117	Capital	Carbon reduction
LED Lighting	Stonehaven Leisure Centre	5	13,646	2,817	Capital	Carbon reduction
Pipework insulation	Stonehaven Leisure Centre	2	4,524	352	Capital	Carbon reduction
LED Lighting	Strathburn Primary School	5	17,604	3,101	Capital	Carbon reduction
Pipework insulation	Strathburn Primary School	6	12,187	938	Capital	Carbon reduction

Interventions	Asset name	Carbon saving (tCO2e)	Capital expenditure (£)	Annual cost saving (£)	Budget	Budget line
EC Fan	Arduthie Primary School	1	6,131	202	Capital	Carbon reduction
LED Lighting	Kemnay Primary School	1	3,236	374	Capital	Carbon reduction
Pipework insulation	Kemnay Primary School	1	2,999	234	Capital	Carbon reduction
Warp-it	Aberdeenshire Council	3	3,912	0	Reserve	Renewable Energy Reserve
Recycling - Compost	Schools still to be identified	16	TBD	TBD	Revenue	*waste E&CS
Energy Sparks	30 pilot schools still to be identified for initial free trial	34	0	TBD	Revenue	*TBD - E&CS for future costs
Road resurfacing		220	0	0	Revenue	Roads Maintenance
Energy from waste		98	TBD	TBD	Capital/Revenue	EfW/Waste disposal
LED Street Lighting		228	800,000	117,629	Capital	Street lighting
Grid decarbonisation		500	0	0	NA	NA
Total		1,445	2,303,021	305,791		

Table 3: Other opportunities identified by services to be assessed in 2022/23 for future Carbon Budgets

Interventions	Carbon saving (tCO₂e)	Estimated Expenditure (£)
General waste reduction and increased recycling on school sites	89	1,230,437
Formal reuse hubs for schools, offices etc. (e.g. furniture, science equipment)	TBD	TBD
Formal reuse hubs for health and social care partnerships	TBD	TBD
LED lights - Waste management & recycling centres	TBD	TBD
LED lights- sports centres & parks	TBD	TBD

Table 4: Abbreviations/Acronyms

BMS	Building Management System
EC	Electronically Commutated
EfW	Energy from Waste
LED	Light-Emitting Diode
NA	Not Applicable
PV	Photovoltaic
TBD	To Be Determined

Appendix 2. Carbon Budget 2022 – 2023 Progress Update

Table 1: Carbon Budget 2022 – 2023 Progress Update

BUSINESS SERVICES	Proposed Identified tCO₂e Savings 2022/23	Anticipated tCO₂e Savings 2022/23	August 2022 Update on Projects
LED Lighting	207	207	Non domestic energy efficiency Framework (NDEEF) - Final package of works is still being agreed, primarily to balance removal of Mackie Academy PVs & Stonehaven Leisure LED's. Further works will be added and final Capital Expenditure, CO ₂ e & financial saving will be provided at the next update.
EC Fan	13	13	
Pipework insulation	37	37	
Solar PV	62	62	
BMS	27	27	
Business Services Total	346	346	
ENVIRONMENT & INFRASTRUCTURE SERVICES			
ENVIRONMENT & INFRASTRUCTURE SERVICES	Proposed Identified tCO₂e Savings 2022/23	Anticipated tCO₂e Savings 2022/23	August 2022 Update on Projects
Introduce/trial more electric landscaping equipment	TBD	TBD	Due to continued supply chain issues the manufacture of the equipment has been delayed, we are now expecting delivery during the last quarter and will get into service as soon as possible after this.
Roads Resurfacing – Warm Mix	220	Unknown at this time. Service involved in national research.	Impacts of global challenges on the Quarry Industry have meant that manufacturers are concentrating on their core business of producing bitumen for “hot mix” at present until supplies normalise and they can offer a greater range of products again. This has forced the shelving of the change to “warm mix” until the Autumn period when it can be reassessed. However, in the meantime the Roads & Infrastructure service has been proactive in considering and seeking out other areas where emissions can be reduced by the service.
Energy from Waste (EfW)	98	0	EfW facility this has been delayed and will now not be operational until May 2023 at the earliest so no carbon savings for internal waste this financial year. This is mainly due to the issues with supply chains and sub-contractors.

LED street lighting	228	228	<p>We have changed around 130 lanterns, These lanterns 56W and the new LED lanterns consume 18W, so a saving of 157kWh.</p> <p>There are 300 lanterns just arrived and another 550 lanterns due in the Autumn . So around 1000 lanterns being or going to be installed over the next 2-4 months.</p>
Warp-It	3	11.8	<p>Warp-It use ongoing with ups and downs in activity as usual.</p> <p>For April, May, June 2022 the estimated emissions saving from Warp-It is 11.8 tCO2e.</p> <p>Associated note is that Property and Facilities have recently nominated Reuse/Circular Economy Leads for Facilities, Design and Construction and Estates respectively. Work ongoing to develop what these roles might look like.</p>
Environment & Infrastructure Services Total	549	239.1	This figure could change again depending on the outcomes from Warm Mix availability within 2022/23.
EDUCATION AND CHILDREN SERVICE			
	Proposed Identified tCO2e Savings 2022/23	Anticipated tCO2e Savings 2022/23	August 2022 Update on Projects
Energy Sparks	34	0	<p>With budget constraints in place, the service is facing difficulties in taking aspects of the proposed work forward. Hesitant in taking forward Energy Sparks without budget identified to continue this work once the free period expires. This would be unfair on school staff and pupils to start a scheme that then has to be withdrawn after a year due to lack of funding.</p>
Improved Recycling/Composting	16	0	<p>With budget constraints in place the service is facing difficulties in taking aspects of the proposed work forward. However, Education & Children's Service has been working collaboratively with the corporate Waste Management Team in supporting the change to three week waste uplift. To complement the work in establishing external waste bin</p>

			requirements, the team has prepared a questionnaire for educational establishments regarding their internal waste bin capacities. This will be circulated to schools in the first few weeks of the 2022/2023 academic session following which options for change will be further considered to harmonise waste and recycling systems within establishments.
Education & Children Services Total	50	0	
HEALTH & SOCIAL CARE PARTNERSHIP			
	Proposed Identified tCO2e Savings 2022/23	Anticipated tCO2e Savings 2022/23	August 2022 Update on Projects
Reduction in business miles	TBD	TBD	No additional comments provided.
Resources and Circular Economy Frameworks	TBD	TBD	No additional comments provided.
Health & Social Care Partnership Total	TBD	TBD	
Grid Decarbonisation			
	500	500	Still estimated to be around 500tCO2e
Total Reductions Identified in March 2022 (tCO2e)			
	1445		
Total Reductions currently anticipated for 2022-23 (tCO2e)			
		1085.1	

*TBD = Data still to be determined for tCO2e savings