

REPORT TO ABERDEENSHIRE COUNCIL – 17 MARCH 2021

CARBON BUDGET 2021-22

1 Reason for Report/Summary

- 1.1 This Report presents the Aberdeenshire Council Carbon Budget for 2021-22 and proposals for the evolution of the Carbon Budget process as we work towards our current 2030 and 2045 emissions targets set out in our [Climate Change Declaration](#).

2 Recommendations

The Council is recommended to:

- 2.1 **Agree a total Carbon Budget of 48,744 tonnes CO₂e for 2021-22, as set out in APPENDIX 1;**
- 2.2 **Consider and comment on the Directorate proposals for CO₂e savings for 2021-22 (APPENDIX 2) and the Directorate commentary (APPENDIX 3); and**
- 2.3 **Instruct Directors to each develop a Carbon Reduction Plan – setting out how their Directorate will reach 75% emissions reduction by 2030, and Net Zero by 2045 – and present this to their relevant Policy Committees by 31 October 2021.**
- 2.4 **Instruct the Director of Infrastructure Services to develop a Medium-Term Carbon Strategy, based on the four Directorate Carbon Reduction Plans, to be presented alongside the Carbon Budget 2022-23.**

3 Purpose and Decision-Making Route

- 3.1 The [Climate Change \(Scotland\) Act 2009](#) (Part 4) requires that public bodies must, in exercising their functions, act:
- In the way best calculated to contribute to delivery of the Act's emissions reduction targets;
 - In the way best calculated to deliver any statutory adaptation programme; and
 - In a way that it considers most sustainable.
- 3.2 The [Climate Change \(Duties of Public Bodies: Reporting Requirements\) \(Scotland\) Order 2015](#) requires public bodies to report annually on compliance with the climate change duties. Aberdeenshire Council's historical reports are available through [Sustainable Scotland Network](#) (2019-2020 Report submitted November 2020 and pending verification).

- 3.3 Aberdeenshire Council's Carbon Budget process, introduced in 2017-18, sets annual targets for emissions (CO₂e) reduction within the Council operations and was established with the aim of ensuring that this was managed and monitored alongside financial budgets and to encourage ownership of emissions across the organisation. Required annual reductions are allocated to each Directorate (**Appendix 1**). Directors are responsible for meeting their Carbon Budget targets and the Sustainability and Climate Change Team are responsible with providing support to the process.
- 3.4 The annual Carbon Budget is set at the Full Council Revenue Budget meeting and Directorates are required to report six-monthly Carbon Budget updates to the Sustainability Committee in May and November, having previously reported to their relevant Policy Committee. Links to six-monthly Carbon Budget updates produced by Directorates so far, as well as an indicative reporting timeline for 2021-22, are given in **Appendix 3**.
- 3.5 The [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019](#) set new national emissions reduction targets as:
- At least 75% lower than the baseline year by 2030;
 - At least 90% lower than the baseline year by 2040; and
 - Net Zero by 2045 ('Net Zero' refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere).
- 3.6 On [18 March 2020](#) Aberdeenshire Council (Item 9) agreed a [Climate Change Declaration](#). The Declaration set new targets of the Council reducing its own emissions by 75% (2010/11 baseline) by 2030 and becoming 'Net Zero' for carbon emissions (CO₂e) by 2045. The more ambitious 2030 target was reflected in the setting of the 2020-21 Carbon Budget and is reflected in the setting of the 2021-22 Carbon Budget (**Appendix 1**).

4 Discussion

- 4.1 The Carbon Budget is a simple tool which sets the overall and Directorate-by-Directorate annual emissions reduction targets based on a linear path towards the future target (currently 75% reduction by 2030) (**Appendix 1**). It is accompanied by a list of planned projects (**Appendix 2**) put forward by the Directorates as a base for their efforts to reduce Directorate emissions in the year in question. The scope of the Carbon Budget is limited in that it only covers Council internal emissions currently [reportable](#) to the Scottish Government and excludes, for example, emissions involved in procurement such as construction or purchase of equipment.
- 4.2 The Carbon Budget for 2021-22 is set as 48,744 tonnes CO₂e (tCO₂e), and this is estimated to require a reduction of 5000 tonnes CO₂e in 2021-22 from the previous year (**Appendix 1**). This reduction is assigned to the Directorates according to the Power of Influence tool as follows.

Directorate	Reduction Target for 2021-22
Overall	5000 tCO _{2e}
Business Services	1750 tCO _{2e}
Infrastructure Services	2500 tCO _{2e}
Education and Children's Services	570 tCO _{2e}
Health and Social Care Partnership	180 tCO _{2e}

- 4.3 Planned carbon reduction projects and changes for 2021-22 totalling 2,370 tonnes CO_{2e} have been identified so far by the Directorates (**Appendix 2**).
- 4.4 Since the establishment of the Carbon Budget in 2017-18 annual targets have generally been met through a combination of Council initiatives and changes and reducing emissions factors for grid electricity. Progress has also been made in terms of the Directorates taking more responsibility for the Carbon Budget and their respective targets. In 2020, Directorates began to submit six-monthly Carbon Budget update Reports to their respective Policy Committees and to the Sustainability Committee (**Appendix 1**). Additionally, in 2020 each Directorate identified a Carbon Budget Lead and these Leads collated relevant information from their Directorates to feed into this Report.
- 4.5 Despite progress to date, there is still work to be done to ensure that the Carbon Budget process is fully embedded, that we have a good understanding of what actions would be required to meet our medium to long-term internal emissions reduction targets, and that the Carbon Budget tool continues to be developed to be most fit for purpose. It is noted that continuing to assign appropriate responsibilities for the oversight and enactment of the Carbon Budget and beginning to review and update the Carbon Budget process were given as climate change priorities for the year ahead as part of our recent Council Climate Change Duties Annual Report ([Sustainability Committee, 11 November 2020](#), Agenda Item 7).
- 4.6 Following Officer review, the key proposal in this Report for the evolution of the Carbon Budget is that it is developed further, to compliment the Medium-Term Financial Strategy and Capital Plan approach. The proposal is that each Director will produce a Carbon Reduction Plan by setting out how their Service will reach 75% reduction in emissions by 2030, and be Net Zero by 2045, this will then form a Medium-Term Carbon Strategy upon which future Carbon Budgets will be set. This will support longer-term and more integrated planning and avoid the Carbon Budget relying on year-by-year projects to achieve savings. The Medium-Term Carbon Strategy will need to be aligned with the relevant financial budgets and use tools such as 'carbon abatement curves' (**Appendix 4**) to highlight financial savings and spend to save options and to show that carbon savings are made in the most cost-effective ways. This proposal is in line with the 'Recommendations for Local Authorities' section of the recent (December 2020) Climate Change Committee Report '[Local Authorities and the Sixth Carbon Budget](#)'.

4.7 A further note of relevance is that [The Climate Change \(Duties of Public Bodies: Reporting Requirements\) \(Scotland\) Amendment Order 2020](#), which came into force on 9 November 2020, introduces new reporting requirements related to our Carbon Budget process. The new reporting requirements for public bodies will be as follows:

- Where applicable, a target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets;
- Where applicable, any targets for reducing indirect emissions of greenhouse gases;
- How the body aligns its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets;
- How the body will publish, or otherwise make available, its progress towards achieving its emissions reduction targets;
- How the body is contributing to Scotland’s Adaptation Programme (the most recent version of which was published in September 2019).

5 Council Priorities, Implications and Risk

5.1 This Report supports the embedding of the key principle of ‘climate and sustainability’ in the new Strategic Priorities of Aberdeenshire Council.

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

Subject	Yes	No	N/A
Financial	X		
Staffing	X		
Equalities		EIA attached Appendix 5	
Fairer Scotland Duty			X
Town Centre First			X
Sustainability	X		
Children and Young People’s Rights and Wellbeing			X

5.3 An Equalities Impact Assessment has been carried out as part of the development of the proposals set out above. It is included as **Appendix 5** and no detrimental impact has been identified.

5.4 The financial implications are potentially significant in reaching carbon emission reduction targets and will need to be addressed on an individual Service and project basis and identified for the organisation as a whole so that they can inform the Council’s Medium-Term Financial Strategy to ensure affordability and also across the Council’s corporate and informed approach. There are no immediate direct staffing implications arising from this Report, however there

will be additional staffing requirements to implement significant emission reduction projects moving forward.

5.5 A Town Centre Impact Assessment was not completed because there are no direct material outcomes of this report that would have an impact on Town Centres.

5.6 The following Risks have been identified as relevant to this matter on a Corporate Level:

- Risk ID ACORP010 as it relates to environmental challenges and Risk ID ACORP006 as it relates to reputation management within the Corporate Risk Register.

The following Risks have been identified as relevant to this matter on a Strategic Level:

- Risk ID ISSR004 as it relates to Climate Change in the Directorate Risk Registers.

6 Scheme of Governance

6.1 The Head of Finance and Monitoring Officer within Business Services have been consulted in the preparation of this Report, their comments are incorporated within the Report and are satisfied that the Report complies with the Scheme of Governance and relevant legislation.

6.2 The Committee is able to consider this item in terms of Section A.8.1 of the List of Committee Powers in Part 2A of the Scheme of Governance as it relates to approval of the annual estimates and setting the council budgets.

Alan Wood

Director of Infrastructure Services

Report prepared by Joel Evans, Team Leader Sustainability and Climate Change (Acting)
03 February 2021

List of Appendices

Appendix 1 – Setting the Carbon Budget 2021-22

Appendix 2 – Directorate planned CO₂e savings 2021-22

Appendix 3 – Directorate commentary

Appendix 4 – ‘Carbon abatement curve’

Appendix 5 – Equalities Impact Assessment

Setting the Carbon Budget 2021-22

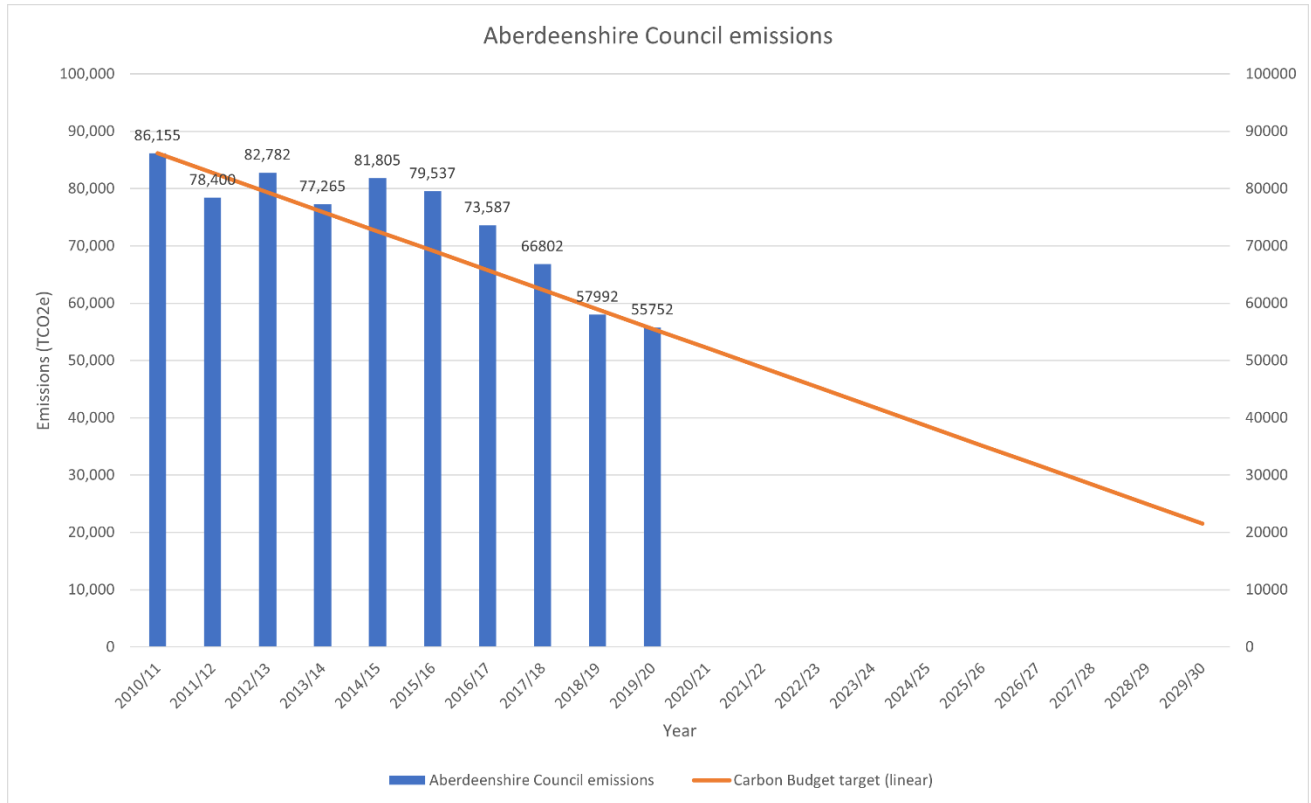
Carbon Dioxide Equivalent (CO_{2e}) is a standard unit for measuring a carbon footprint and in this Report is expressed in tonnes of Carbon Dioxide Equivalent (tCO_{2e}). It is used to express the impact of each different greenhouse gas in terms of the amount of carbon dioxide that would create the same amount of warming. Therefore, the Council's carbon footprint consists of lots of different greenhouse gases expressed as a single number.

The following table and graph show Aberdeenshire Councils historic emissions data against the set Carbon Budget targets.

Annual progress towards a new 75% by 2030 target:

Financial Year	Actual Emissions Reported (tCO _{2e})	Carbon Budget Required to reach Target (tCO _{2e})
2010/11	86,155	86155
2011/12	78,400	82754
2012/13	82,782	79353
2013/14	77,265	75952
2014/15	81,805	72551
2015/16	79,537	69150
2016/17	73,587	65749
2017/18	66802	62348
2018/19	57992	58947
2019/20	55752*	55546
2020/21	Determined 11/2021	52145
2021/22	Determined 11/2022	48744
2022/23	Determined 11/2023	45343
2023/24	Determined 11/2024	41942
2024/25	Determined 11/2025	38541
2025/26	Determined 11/2026	35140
2026/27	Determined 11/2027	31739
2027/28	Determined 11/2028	28338
2028/29	Determined 11/2029	24937
2029/30	Determined 11/2030	21536

*Figure awaiting verification



A CO₂e reduction target for 2021-2022 has been set as 5000 tCO₂e. This is an increase on the 2020-2021 reduction target of 3400 tCO₂e as it is anticipated that the projects delayed due to the lockdown period will have meant reduced CO₂e savings in the 2020-2021 year.

A Power of Influence Index was utilised to determine how the allocation should be distributed across the Directorates with Services putting forward actions to meet these targets. The Index demonstrates which Services have the most influence (through Service plans and budget) to implement carbon reduction projects.

The following table shows the overall reduction target split between the four Directorates.

Directorate	Reduction Target for 2021-22
Overall	5000 tCO ₂ e
Business Services	1750 tCO ₂ e
Infrastructure Services	2500 tCO ₂ e
Education and Children's Services	570 tCO ₂ e
Health and Social Care Partnership	180 tCO ₂ e

Directorate planned CO₂e savings 2021-22

	Planned CO₂e savings 2021-2022 against 5,000 tonne target
	(tonnes)
BUSINESS SERVICES	
Energy-efficiency measures (across Council)	900
Carbon emission factor	1000
Office and depot rationalisation	*
Estate modernisation	*
Business Services total identified to date	1900
INFRASTRUCTURE SERVICES	
Hydrogen vehicles added to the Fleet	6
Electric vans replacing diesel	20
Utilising telematics – new Alison gearbox software	60
LED street lighting	160
Constraints on business travel and new ways of working	180
Warp-It reuse portal	*
Infrastructure Services total identified to date	426
EDUCATION AND CHILDREN SERVICES	
Education and Children’s Services Sustainability Strategy	*
LED lighting at Alford Ski Slope	*
Education & Children Services total identified to date	*
HEALTH AND SOCIAL CARE PARTNERSHIP	
Estate rationalisation	44
Changes in working patterns and reduced mileage	*
New solutions, including digital, for community care	*
Goods and Equipment Group	*
Health & Social Care Partnership total identified to date	44
Total reductions identified (tCO₂e)	2,370
Reduction still required (tCO₂e)	2,630

*Figures not calculated

Directorate commentary

Directorate six-monthly Carbon Budget updates submitted so far

Business Services

- Business Services Committee, [07 January 2021](#), Agenda Item 7

Infrastructure Services

- Infrastructure Services Committee, [01 October 2020](#), Agenda Item 6
- Sustainability Committee, [11 November 2020](#), Agenda Item 10
- Infrastructure Services Committee, [11 March 2021](#) (TBC)

Education and Children's Services

- Education & Children's Services Committee, [08 October 2020](#), Agenda Item 9
- Sustainability Committee, [11 November 2020](#), Agenda Item 10

Indicative Carbon Budget reporting timeline 2021-22

The annual Carbon Budget is set at the Full Council Revenue Budget meeting each year and Directorates are required to report six-monthly Carbon Budget updates to Sustainability Committee in May and November, having previously reported to their relevant Policy Committee. An indicative reporting timeline for 2021-22 is given below.

Committee	Carbon Budget report	2021												2022	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Full Council	2021-22			17											10
Policy	BSC	07							09						
	ECS			18				26							
	ISC			11					30						
	CC				1				20						
IJB			31												
Sustainability					19						10				
Area	TBC	Nature and type of reporting to Area Committees under consideration.													

Directorate Commentary

The following sets of commentary for the Directorates relate to the planned projects listed in Appendix 2 against the 2021-22 Carbon Budget, but also the other potential projects relating to the Carbon Budget and wider carbon reduction in the community.

Business Services Commentary

Energy Efficiency

A tender has been issued through the Non-Domestic Energy Efficiency Framework (NDEEF) for energy efficiency works that will reduce carbon emissions and energy costs. The works are being funded through the Carbon Reduction budget. Further works will be tendered through this Framework. Additional energy efficiency and renewable energy works could be delivered through this Framework if the Carbon Reduction budget is increased.

Carbon Emissions Factor

The carbon emissions from buildings have reduced significantly as the carbon conversion factors have changed, mainly due to the increased use of renewable energy for the generation of electricity. As the factors change in future years, the carbon emissions reductions will be calculated and reported.

Office and Depot Strategy

The carbon emissions from offices and depots are calculated and reported. The emissions will reduce as offices and depots are rationalised and if there is a reduction to the number of staff who return to work in offices after Covid 19 restrictions are removed and the number of offices required can be reduced. Carbon reductions will be calculated when decisions are made.

Estate Modernisation

Estate modernisation includes a number of opportunities to reduce carbon emissions. Asset management includes Service strategies and property rationalisation, shared needs, challenging the use of assets, addressing backlog maintenance and improving the condition of assets and asset disposal. As Estate Modernisation is developed the carbon reductions will be calculated and reported.

Scottish Government – Climate Change Plan

The Scottish Government have indicated that they will produce a number of policies and introduce legislation in the next few years. This will include an Energy Strategy, Electricity Generation Policy, Hydrogen Action Plan, Biomass Action Plan, Heat in Building Strategy and New Build Zero Emission from Heat Standards and review the Energy Efficient Standards for Social Housing (ESSH). These will all have

implication for the Council and will reduce carbon emissions. As these policies are introduced and implemented the carbon reductions will be calculated and reported.

Infrastructure Services Commentary

1. **Projects from 2020/21 which need to be completed/continued/fully developed in 2021/22**

Hydrogen Vehicles added to the Fleet

These are in place but have done limited mileage due to changed work practices under Covid19 but should come into full operation later in 2021.

Electric vans replacing diesel – front line

This is an ongoing activity based on available grants/ funding. There are 15 EVs coming online and two electric minibuses. More details will be available in the Fleet Strategy currently being developed. The carbon savings shown in Appendix 2 are for full utilisation of vehicles bought in 2020/21.

Utilising Telematics – New Alison Gear Box Software

Carry over project from 2020/21 that was not progressed. Carbon savings shown in Appendix 2 are based on what was submitted last year.

Introduce/trial more Electric Landscaping Equipment

Trail to determine if a small number of battery alternatives are as equally useable in day to day operations as petrol driven plant. Costs are potentially of a factor of two to three compared to petrol and other similar fuels so will need to be considered.

LED Street Lighting

Ongoing programme of work will be completed in 2021/22. The carbon savings shown in Appendix 2 are based on estimated electricity reductions converted into tCO₂e.

LED at HWRC

Carry over project from 2020/21 that was not progressed.

Warp-It

The ongoing use of the Warp-It reuse portal within the Council (managed by Infrastructure Services) is expected to bring ongoing savings, however, due to the uncertainty around operational restrictions going forward and the use of offices, the saving for 2021-22 is not estimated.

2. New Projects for 2021/22 Identified

School Transport Route Optimisation

A proposed route optimisation exercise of north Aberdeenshire mainstream school transport services, the contracts for which are due for renewal in August 2021.

A similar exercise two years ago resulted in a significant reduction in vehicle mileage in south Aberdeenshire. These journeys do not currently sit within the recorded Carbon output for Aberdeenshire Council, but it should be recorded as such activity should and no doubt will come into the Council's totals at some stage.

Telematics

Both additional software and better use of available data to be worked up in more detail.

Greenspace

Potential projects in this area to be confirmed.

Constraints on Business Travel and New Ways of Working

Assumption of continued reduced mileage in all forms of travel into 2021/22. The carbon savings shown in Appendix 2 are based on 145 tCO₂e saving from 80% reduced mileage on historic rates and 35 tCO₂e saving from no rail or air travel, giving a total of 180 tCO₂e saving. Remote working and reduced travel could be built into terms and conditions and policies as a more permanent feature.

Education and Children's Services Commentary

Work is starting in Education and Children's Services on a Sustainability Strategy. The Service recognises that we have an impact on the environment and is working to reduce its impact locally and globally through responsible waste, energy and water management. As part of our commitment to safeguarding the local environment we will develop an approach to protect our natural surroundings and work collaboratively with local communities to increase and protect the biodiversity on the sites where we are custodians.

A key element of the carbon reduction strategy is the development and implementation of a Sustainability Policy for Schools which will be developed with pupils and staff from schools with the support of Elected Members and colleagues from across the Authority. The intention is to collaborate with other Local Authorities and the Sustainable Scottish Network in the development of this area of work. This will be a comprehensive policy and include developing strategies for energy budget management in school, food recycling in all school areas, general waste recycling, reduction in the volume of paper used (schools consume approximately 75% of all paper utilised within the Council), litter management, use of sustainable resources and pupil projects in this area. There is already a considerable amount of excellent work being undertaken by individual schools and existing good practice will be included in the development of the policy. This will require a mixture of process change but equally and possibly more importantly cultural change.

Various specific projects were identified towards achieving this goal, for example, replacing current ovens in schools with more energy efficient ovens instead of options for 'a like for like' basis, and sustainable grounds maintenance for schools taking into account the need for the protection of the biodiversity of sites. Live Life Aberdeenshire also have a number of projects planned for the year ahead, for example the change of vehicles to electric vans and the fitting of heat recovery systems to swimming pool buildings. However, the COVID-19 pandemic has impacted on this and all the other projects. It is hoped to progress with them as soon as is possible. Work in the future will include contributing to the development of the Council's Environmental Change Policy, Climate Change Declaration, Resources and Circular Economy Commitment and other sustainability related policies and strategies.

Catering

Success in introducing food waste collection in all schools. Monitoring and data collection will reveal savings in due course.

Previously identified projects as below with progress struggling to be made due to resource and expertise:

1. Replace current ovens with more energy efficient ovens instead of 'like for like' and replacement of Steam ovens with Combination ovens.
2. Replace sterilising sinks with dishwashers.

For these areas, energy savings would be made but there is a need to identify data on usage and facts and figures.

Live Life Aberdeenshire

Examples of recent work completed:

Project Title	Action/impact
Upgrade of aquarium display lighting to low energy LED lights - 2017	As part of the aquarium refurbishment project, the electrical wiring was upgraded throughout the aquarium and all lighting units were changed to low-energy LEDs – including specialised lights for the aquarium tanks, as well as the display areas. This was funded in part by sponsorship from energy firm TAQA. Tank lights are on timers that allow them to come on and go off again gently at the required time of day, giving the fish a ‘sunrise’ and ‘sunset’ period.
Replacement of seawater chiller - 2020	The seawater chiller is a critical component of the aquarium life support system that cools the water circulating to the tanks to ensure consistent temperature is maintained. The chiller unit and ancillary pumps were replaced in August/September 2020. The new chiller unit, combined with variable speed drives on the pumps, are significantly more efficient. Although the pumps have had some issues and the project is not fully complete yet, it was estimated that the new set-up would provide at least a 15% reduction in energy use, compared to the old unit.

Project proposals* (tCO₂e savings not yet identified):

*The project proposals below have the potential to impact the current scope of Aberdeenshire Council’s Carbon Budget, but also of the emissions of the wider community. Some proposals (for example electric vehicles) would have a direct link to E&CS but would be classified as savings under the budget-holding Directorate (Fleet in Infrastructure Services in the case of electric vehicles).

Project Title	Action/impact
Electric vans	<p>Change vehicles/vans used by Leisurelend and the events team.</p> <p>Instal electric charging points at LLA sites to support charging as required.</p> <p>Removal of mobile fleet. New bespoke home delivery model. Route planning with the electric vehicles will ensure a reduction in the carbon footprint.</p> <p>Change halls van to electric.</p> <p>Add electric charging points at halls.</p>
Heat recovery systems	<p>Retro fit heat recovery systems to swimming pool buildings. A huge amount of heat is lost through pool systems.</p> <p>Ensure heat recovery systems are fitted to all new or refurbished facilities.</p>
Solar panels	<p>Fit solar panels onto LLA buildings, recover as much solar energy as possible – LLA buildings are generally on a large footprint meaning these could be particularly efficient.</p>
<p>Wind turbines</p> <p>Insulation</p> <p>Lighting Halls</p> <p>Windows</p> <p>Electrical appliances</p> <p>Princh – print from home</p> <p>Return bins</p>	<p>Explore whether small wind turbines could be fitted to LLA buildings.</p> <p>Provide insulation in hall lofts for energy savings.</p> <p>Replace bulbs with LED energy saving bulbs for normal and stage lighting.</p> <p>Window / door replacement.</p> <p>Replace old appliances with new energy efficient appliances.</p> <p>Users will be able to print to library printers (and subsequently all LLA facilities) from home. This is expected to reduce the number of home printers and cartridges for the occasional printing that people might have. Payment will be online.</p> <p>Library Service is installing return bins in some localities where there is not a library provision. This will allow residents to return resources without using their car to drive to their nearest library.</p>

Project Title	Action/impact
Lockers/smallest library	Library Service is looking to install digital library lockers in some localities. This will provide customers with an easy return and pick-up point for their reserved items. Due to an improvement in Library Management Systems for external connectivity these items may be placed in other services such as supermarkets and train stations, allowing for more interaction during a journey for another reason.
Digital Services	Following the success of digital services during the Covid pandemic the Library Service will continue to improve and increase access to all of our digital services. This reduces the need for travel.
LED lighting Alford Ski Slope	Expected to be undertaken as part of wider refurbishment – expected to be completed May 2021.

Aberdeenshire Health and Social Care Partnership

The Partnership works to deliver Health and Social Care services under a joint board of Aberdeenshire Council and NHS Grampian. As a Partnership, we work within the frameworks of both organisations.

Consideration of Carbon Budget Implications

A consideration of Carbon Budget implications is being included when considering any changes to properties, and it is taken into account in the decision-making process.

Estate rationalisation

Rationalisation of properties used by Partnership services is being considered as part of a number of wider reviews which are underway, including a future needs analysis for Care Home and Homely Setting provision. Confirmation of plans and details with regard to potential carbon savings are to be confirmed.

Changes in working patterns and reduced mileage

We already have a significant saving in business miles due to the change in working patterns due to Covid-19 issues, which is expected to continue.

In addition, there are several projects within the Partnership's Strategic Delivery Plan which should reduce mileage further, including 'Hospital at Home' and enhanced dementia care in communities. There is a widespread move towards the use of digital solutions and community support across the Partnership, including 'Near Me' and the maximisation of smart technology in homes and homely settings to promote independence but these are at an early stage and so it is not possible to estimate impact on carbon emissions as yet.

Goods & Equipment Group

The Group is working to maximise the value of resources and reduce over-purchasing and waste.

‘Carbon Abatement Curve’

At the request of Councillors in early 2020, a ‘Carbon Assessment Tool’ was developed and presented at the second Financing Energy Efficiency Measures Workshop, for Members on 28th September. The tool developed by the Energy Management Team, enables fully costed projects to be assessed in terms of financial and carbon saving viability, in comparison to other proposed projects.

Using the capital cost of the proposed project and its expected useful lifetime, the cost of borrowing is determined over the period. The estimated energy savings and carbon savings are then used to calculate the value of energy savings - with adjustments made for expected energy prices and carbon factors over the duration. The savings are then used to determine a payback period for the project and eventually a measure of best value in terms of energy and carbon savings, proportionate to the capital cost of investment including borrowing costs.

The resultant values are then plotted against each other to provide a reference tool that can be used to assess the best return on the investment for a project, relative to energy and carbon savings.

The graph below (sometimes referred to as a Carbon Abatement Curve) shows worked examples of proposed projects identified by the Energy Management Team, for consideration for implementation - at a glance the ‘Best Value’ Projects can be assessed to aid and inform strategy for future capital investments in energy and carbon saving projects. Those projects to the right of the graph with a positive value are considered more attractive and a better return on investment in terms of financial payback and carbon savings.

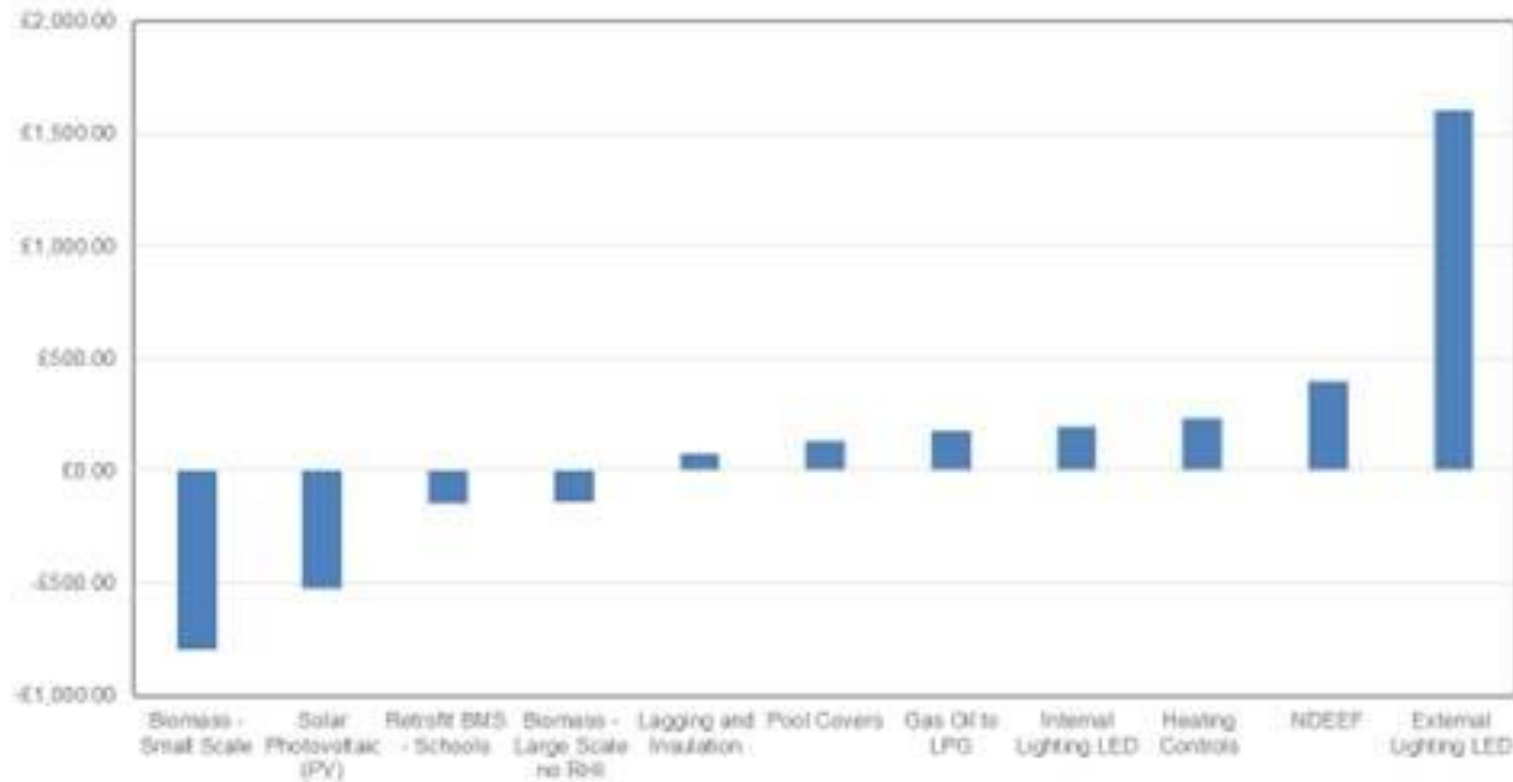
Whilst to date only typical energy saving projects for operational Council buildings have been assessed using the tool – any proposed project can be assessed using the tool providing the essentials of capital cost, project lifetime and expected energy and carbon savings are known.



From mountain to sea



Energy Efficiency Measures £ Net Saving / Tonne CO₂ over Lifetime



EQUALITY IMPACT ASSESSMENT

EIA Version	Date	Author	Changes
2	03/02/2021	Joel Evans	

Stage 1: Title and aims of the activity (“activity” is an umbrella term covering policies, procedures, guidance and decisions including those that affect services the council delivers).	
Service	Infrastructure Services
Section	Economic Development and Protective Services
Title of the activity etc.	Carbon Budget 2021-22
Aims and desired outcomes of the activity	<p>The Carbon Budget is a simple tool which sets overall and Directorate-by-Directorate annual emissions reduction targets based on a linear path towards to future targets set in Aberdeenshire Council’s Climate Change Declaration. It is accompanied by a list of proposed projects put forward by the Directorates as a base for their efforts reduce Directorate emissions in the year in question. The scope of the Carbon Budget is limited in that it only covers Council internal emissions currently reportable to the Scottish Government and excludes, for example, emissions involved in procurement such as construction or purchase of equipment.</p> <p>The Carbon Budget process supports Aberdeenshire Council’s public body duty, set out in the Climate Change (Scotland) Act 2009 (Part 4), to act in the way best calculated to contribute to delivery of national emissions reduction targets.</p>
Author(s) & Title(s)	Joel Evans, Team Leader Sustainability and Climate Change (Acting)

Stage 2: List the evidence that has been used in this assessment and explain what it means in relation to the activity you are assessing.		
Evidence	What does it say?	What does it mean?
Internal energy, fuel, transport and waste data	Since the establishment of the Carbon Budget in 2017-18 annual targets have generally been met through a combination of Council initiatives and changes and reducing emissions factors for grid electricity, however there is still a lot of work to be done to meet the new emissions reduction targets for 2030 (75% reduction) and 2045 ('Net Zero') set out in our Climate Change Declaration .	Addressing our new internal emissions reduction targets is likely to require significant increases in understanding and planning with regard to emissions, with potential for significant impacts on Council finance and operations. This will require leadership and strategic decision-making, balancing a range of priorities.
Internal consultation with Directorates	While we have been broadly on track with meeting our emissions reduction targets so far there are a number of unknowns and challenges, particularly financial, with meeting our 2030 (75% reduction) and 2045 ('Net Zero') targets.	Longer-term Directorate planning is required to understand the options and deciding the path forward with regard to addressing our emissions reduction targets.
Climate Change (Emissions Reduction Targets) (Scotland) Act 2019	<p>The new national emissions reduction targets are:</p> <ul style="list-style-type: none"> • At least 75% lower than the baseline year by 2030; • At least 90% lower than the baseline year by 2040; and • Net Zero by 2045 ('Net Zero' refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere). 	There is increased ambition in national legislation regarding emissions reduction, which will entail increased ambition for the public sector and Local Authorities.

<p>The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020</p>	<p>The new reporting requirements for public bodies will be as follows:</p> <ul style="list-style-type: none">• Where applicable, a target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets;• Where applicable, any targets for reducing indirect emissions of greenhouse gases;• How the body aligns its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets;• How the body will publish, or otherwise make available, its progress towards achieving its emissions reduction targets;• How the body is contributing to Scotland's Adaptation Programme (the most recent version of which was published in September 2019).	<p>Longer-term planning towards emissions reduction targets will be further driven by legislation.</p>
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Stage 3: Evidence Gaps.	
Are there any gaps in the information you currently hold?	There is a gap in medium-to-long-term planning to enable understanding of options and deciding the path forward with regard to addressing our emissions reduction targets.

Stage 4: Measures to fill the evidence gaps.		
What measures will be taken to fill the information gaps before the activity is implemented? These should be included in the action plan at the back of this form.	Measures:	Timescale:
	The Carbon Budget 2021-22 report to the Full Council Revenue Budget meeting on 17 March 2021 recommends that Directors are instructed to develop Carbon Reduction Plans setting out how their Directorates will reach 75% emissions reduction by 2030, and Net Zero by 2045.	17 March 2021
	The Carbon Budget 2021-22 report to the Full Council Revenue Budget meeting on 17 March 2021 recommends that the Director of Infrastructure Services is instructed to develop a Medium-Term Carbon Strategy based on the four Directorate Carbon Reduction Plans, to be presented alongside the Carbon Budget 2022-23.	17 March 2021

Stage 5: What steps can be taken to promote good relations between various groups/areas?	
These should be included in the action plan.	Ensure that there is good medium-to-long-term planning to enable decisions to be made regarding addressing emissions reduction targets based on good understanding of implications.

Stage 6: How does the policy/activity create opportunities for advancing equality of opportunity?
With the potential for significant changes in Council operations comes the potential for significant impact on Council staff and local communities and therefore the opportunity to consider the advancement of equality of opportunity through the changes, for example through local economic development.

Stage 7a:

Are there potential impacts on protected groups?

The protected groups covered by the equality duty are: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

Who is affected by the activity or who is intended to benefit from the proposed activity and how?
Complete the table below for each protected group by inserting "yes" in the applicable box/boxes below.

	Positive	Negative	Neutral	Unknown
Age – Younger	Yes	Yes		
Age – Older	Yes	Yes		
Disability	Yes	Yes		
Race – (includes Gypsy Travellers)	Yes	Yes		
Religion or Belief	Yes	Yes		
Sex	Yes	Yes		
Pregnancy and maternity	Yes	Yes		
Sexual orientation – (includes Lesbian/ Gay/Bisexual)	Yes	Yes		
Gender reassignment – (includes Transgender)	Yes	Yes		
Marriage and Civil Partnership	Yes	Yes		

