

REPORT TO ABERDEENSHIRE COUNCIL – 18 MARCH 2020

CARBON BUDGET 2020/2021

1 Reason for Report / Summary

1.1 The report presents the Aberdeenshire Council Carbon Budget for 2020/21.

2 Recommendations

The Council is recommended to:

2.1 Agree a total Carbon Budget of 52,145 tonnes CO₂e for 2020/21 as set out in Appendix 3;

2.2 Agree future Carbon Budgets for 2021/22 to 2029/30 on a provisional basis as set out in table two in Appendix 3;

2.3 Note the risks set out in Appendix 5;

2.4 Delegate the responsibility to each Director to secure their reduction targets as set out in Appendix 3 and 4, including currently unidentified CO₂e savings; and

2.5 Instruct each Director to report in year progress at 6 monthly intervals to the relevant Policy Committees and to the Sustainability Committee.

3 Purpose and Decision Making Route

3.1 The Conference of Parties (COP21) Agreement, to which the UK and Scotland subscribe, came into effect on 4 November 2016 and binds nations to hold global temperature rise to under 2 degrees Celsius. The UK and Scottish Governments both have legislation addressing the objectives of reducing carbon emissions and have signed up to the COP21 Paris Agreement.

3.2 On 11 December 2019, the European Commission presented the European Green Deal which sets out how to make Europe the first climate-neutral continent by 2050. By April 2020, the Commission will be presenting the first 'European Climate Law' to support setting a net zero target by 2050 into legislation.

3.3 On 25 September 2019 the Scottish Government set its new reduction targets in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 as:

- at least 75% lower than the baseline year by 2030
- at least 90% lower than the baseline year by 2040

- Net Zero by 2045 ('Net zero' refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere)

Currently only sections 30-33 of the 2019 Act are in force with a date yet to be appointed for when the whole Act will come into force.

- 3.4 All public bodies in Scotland have a role in supporting the Scottish Government in meeting its targets. Aberdeenshire Council reports annual emissions to the Scottish Government as part of its [Public Bodies Climate Change Duties](#). The duties placed on public bodies under Part 4 of the Climate Change (Scotland) Act 2009 require that a public body must, in exercising its 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.

4 Discussion

- 4.1 Aberdeenshire Council has utilised a Carbon Budget process since 2017/18 as a method to plan and manage emission reduction across the organisation.
- 4.2 Appendix 1 demonstrates the progress being made annually by Aberdeenshire Council as it moves closer towards its current reduction target of 44% by 2025. Aberdeenshire Council is now in a position to consider an ambitious change in practice, and if this was to be achieved, to consider amending the current emission reduction target to 75% by 2030 and Net Zero by 2045 in line with the new Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.
- 4.3 If a new target of 75% by 2030 is to be realised, as per the proposed Climate Change Declaration then the required linear reduction would set a Carbon Budget of 52,145 tCO₂e for 2020/21 as demonstrated in Appendix 2.
- 4.4 Appendix 3 lays out how the Carbon Budget 2020/2021 – 2029/2030 has been determined. The Carbon Budget concept has been to allocate an allowance of tonnes Carbon Dioxide Equivalent (tCO₂e) emissions annually for each Directorate. Directors are then required to keep within their allowance over the financial year allowing the Council to better manage how it works towards meeting its emission reduction targets.
- 4.5 Carbon Dioxide Equivalent (CO₂e) is a standard unit for measuring carbon footprints. 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.

- 4.6 Actions have already been identified in Appendix 4 for each Directorate totalling an overall 1219 tCO₂e reduction at this time. During 2020/21 further CO₂e savings will be developed to meet the reduction target of 3400 tCO₂e.
- 4.7 The Carbon Budget 2020/2021 relates to Aberdeenshire Council's own emissions and not to the wider community or business emissions that relate to the area of Aberdeenshire. Work being done on the North East Scotland Sustainable Energy Action Plan (NESSEAP) will capture this separately alongside Climate Ready Aberdeenshire the new climate change mitigation and adaptation strategy which is in its very early stage of development.
- 4.8 To further advance the Carbon Budget process, the 2020/21 budget will continue to consider options for capturing information on new significant developments e.g. new school builds, that may require to be offset against intended savings. Significant new developments will be required to be measured and reviewed. In addition to this, risks, budget pressures and part year savings will continue to be examined.

5 Council Priorities, Implications and Risk

- 5.1 This report helps deliver Council Priority 11 - Protect our special environment, including tackling climate change by reducing greenhouse gas emissions.
- 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 is attached as Appendix 6	
Fairer Scotland Duty			X
Town Centre First			X
Sustainability	X		
Children and Young People's Rights and Wellbeing			X

- 5.3 An Equality Impact Assessment has been carried out as part of the development of the proposals set out above. It is included as Appendix 6 and no detrimental impact has been identified.
- 5.4 The financial implications will be 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. Where carbon reduction projects provided accurate financial savings this has been interwoven into the financial budget process for 2020/2021. 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 It is important to consider, report and accept specific risks in setting the Carbon Budget, and these are listed in Appendix 5. This list is not exhaustive. 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 and 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 Council is able to consider this item in terms of Section A8.1 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.

Stephen Archer
Director of Infrastructure Services

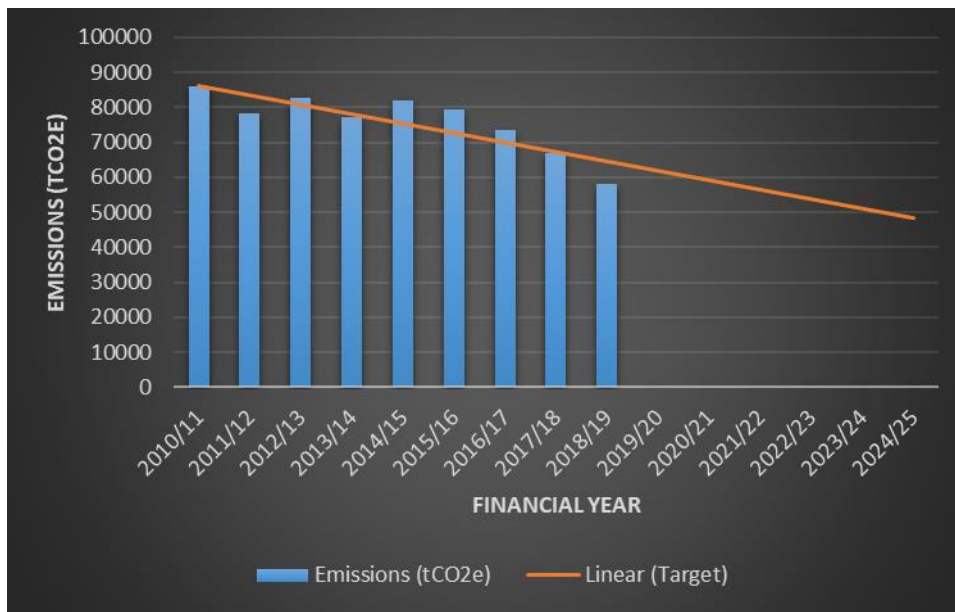
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24 February 2020

List of Appendices

- Appendix 1 - Annual progress towards current 44% by 2025 target
- Appendix 2 - Annual progress towards a new 75% by 2030 target
- Appendix 3 - Determining the Carbon Budget 2020/2021 – 2029/2030
- Appendix 4 - The Carbon Budget 2020/2021
- Appendix 5 - Risks
- Appendix 6 - Equality Impact Assessment

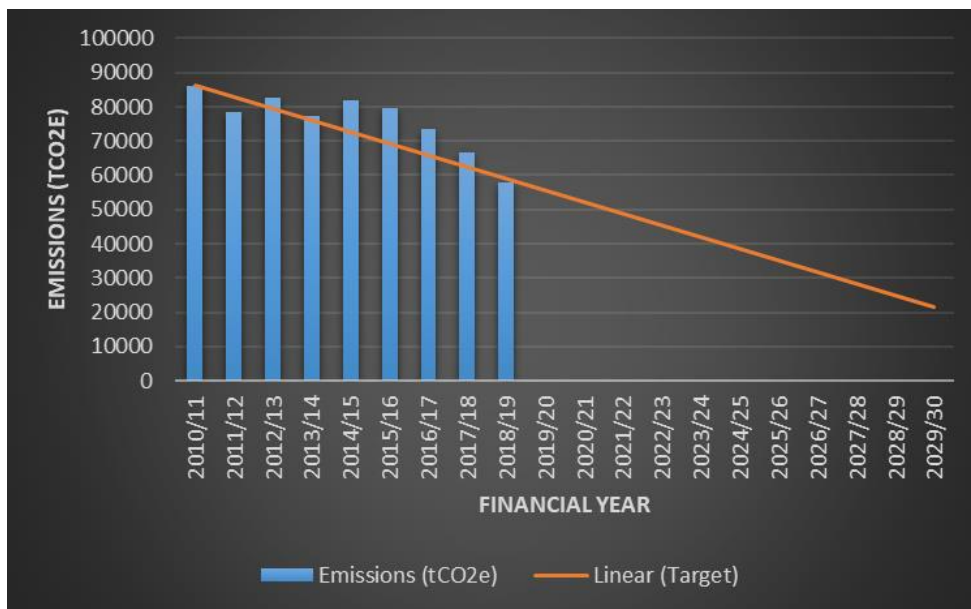
Annual progress towards current 44% by 2025 target:

Financial Year	Actual Emissions Reported (tCO2e)	Carbon Budget Required to reach Target (tCO2e)
2010/11	86,155	86,155
2011/12	78,400	83,447
2012/13	82,782	80,740
2013/14	77,265	78,032
2014/15	81,805	75,324
2015/16	79,537	72,616
2016/17	73,587	69,909
2017/18	66802	67,201
2018/19	57992	64,493
2019/20	Determined 11/2020	61,786
2020/21	Determined 11/2021	59,078
2021/22	Determined 11/2022	56,370
2022/23	Determined 11/2023	53,662
2023/24	Determined 11/2024	50,955
2024/25	Determined 11/2025	48,247



Annual progress towards a new 75% by 2030 target:

Financial Year	Actual Emissions Reported (tCO2e)	Carbon Budget Required to reach Target (tCO2e)
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	Determined 11/2020	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



1 Determining the Carbon Budget 2020/2021 – 2029/2030

1.1 There are many different factors we must consider when looking to amend our target, some of which will continue to support our progress:

- New targets within the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 and changes to expectations for target setting within the public sector (as was considered in the [Big Climate Conversation: The Role of Public Sector Bodies in Tackling Climate Change. A Consultation.](#)
- The new Programme for Government plans and targets.
- Overall a fundamental shift as an organisation in practices and policies to support an ambitious but achievable emissions reduction target.
- All services engaged with climate change action understanding their role and possible action.
- Non Domestic Energy Efficiency Framework (NDEEF) - carbon reduction in buildings being led by Property and Facilities. Expected outcome of ongoing annual energy savings of 605 tonnes per year for the lifetime of the assets from 2021/22 onwards.
- Continued LED street lighting programme with anticipated completion in 2021.
- Newly adopted Resources and Circular Economy Commitment.
- The challenge of decarbonising heat and fleet for our rural region.
- New significant developments, Programmes and Strategies which may increase emissions within the organisation and/or region.
- The annual changes to the UK emission factors.
- Funding opportunities (e.g. Green Investment Portfolio, Green Growth Accelerator, new Energy Efficiency Fund).
- Offsetting – determine sequestration already happening on council land and consider a tree planting plan or areas to enhance (afforestation, restoration of ecosystems, green infrastructure etc.) on council land/properties and the wider Aberdeenshire region. Could also consider opportunities for a longer term investment in commercial forestry.

1.2 An allocation of CO₂e for 2020/21 has therefore been established as 52,145 tCO₂e. Given the 2-year gap between 2018/19 data and 2020/21 target and the need to keep the momentum in reducing emissions, a required reduction target of 3400 tCO₂e for 2020/21 has been set. 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.

Table One

Directorate	Reduction Target for 2020/21
Business Service	1200 tCO ₂ e
Infrastructure Service	1700 tCO ₂ e
Education and Children's Service	380 tCO ₂ e
Health and Social Care Partnership	120 tCO ₂ e
Total	3400 tCO ₂ e

- 1.3 Actions have already been identified in Appendix 4 for each Directorate totalling an overall 1219 tCO₂e reduction at this time. During 2020/21 further CO₂e savings will be developed to meet the reduction target of 3400 tCO₂e.
- 1.4 Actions to reduce the CO₂e saving will be led by the relevant service. In order to monitor the Carbon Budget, CO₂e emissions will be reported annually through the Public Bodies Climate Change Duties Report. Visible changes in behaviour will be expected as well as financial savings within some budget lines.
- 1.5 Appendix 5 highlights risks, budget pressures and significant developments which may create additional challenges for Aberdeenshire Council to meet its Carbon Budget for 2020/21 and beyond.
- 1.6 A summary of future Carbon Budgets is provided in Table Two below:

Table Two

Financial Year	Carbon Budget required to reach target (tCO₂e)
2020/21	52145
2021/22	48744
2022/23	45343
2023/24	41942
2024/25	38541
2025/26	35140
2026/27	31739
2027/28	28338
2028/29	24937
2029/30	21536



	Proposed Identified CO2e Savings (tonnes) 2020/21
BUSINESS SERVICES	
Energy Efficiency Measures (across Council)	680
Office Rationalisation	115
Depot Strategy/Rationalisation	77
Asset Review & Disposal	*
Continued expansion of car club scheme	40
Integration of EVs and Hydrogen into the pool fleet	10
Recycled Paper	*
Resources and Circular Economy Frameworks	*
Business Services Total Identified to date	922
INFRASTRUCTURE SERVICES	
Hydrogen vehicles added to the Fleet	*
Electric vans replacing diesel – front line	*
Utilise Telematics – New Alison Gear Box Software	60
Introduce/trial more electric landscaping equipment	*
LED street lighting	*
LED at HWRC	*
Resources and Circular Economy Frameworks	*
Warp-It	70
Infrastructure Services Total Identified to date	130
EDUCATION AND CHILDREN SERVICE	
Macduff Aquarium - Replace Seawater chiller	*
Catering – Oven replacements	*
Catering – Dishwasher replacements	*
Green Schools Programme	167
Resources and Circular Economy Frameworks	*
Education & Children Services Total Identified to date	167
HEALTH AND SOCIAL CARE PARTNERSHIP	
Reduction in business miles – Improved planning	*
Resources and Circular Economy Frameworks	*
Health & Social Care Partnership Total Identified to date	*
Total Reductions Identified (tCO2e)	1219
Reduction still required (tCO2e)	(2181)

*Data to determine CO2e savings is still being collected therefore an estimated reduction figure has not been calculated at this time. Work will be done with services over 2020/2021 to determine this figure.

1 Risks

- 1.1 A number of risks have been identified when developing the proposed carbon budget. These are highlighted below:
- (1) Calculations of emission reductions are a best estimate with the data available therefore all calculations must only be considered as an estimate. Any changes in consumption or emissions data will be monitored and reported on at the appropriate time.
 - (2) In some cases, full CO₂e savings of actions listed will not be fully accounted for until the following financial year. Part year savings may need to be considered if there are delays in projects being put into action. This would mean that projected savings would be less than originally calculated and therefore action elsewhere may be required to make up the difference. This can be captured and considered during the quarterly update process with appropriate action taken if needed.
 - (3) Many climate change mitigation actions require behaviour change by staff and Members across the organisation. To be successful this will require both top down and bottom up visible action and support across all services. This can be monitored through regular updates to SLT and service team meetings.
 - (4) Funding through the Renewable Energy Reserve has motivated services to consider opportunities for investing in projects which will reduce their carbon emissions. All monies within this fund are now allocated to projects so a new funding stream or ways of seeking funding opportunities must be taken on board for continued progress in investment in climate change mitigation and adaptation.
 - (5) Changes in climate change mitigation and adaptation legislation will need to be monitored and targets adjusted to meet any additional statutory requirements. This will continue to be monitored by the sustainability team and reported on to the Sustainability Committee.
 - (6) There is a political risk associated with not meeting the Council's agreed emissions reduction target. The Carbon Budget process of Aberdeenshire Council is recognised as best practice by public sector organisations and should continue to be the process used for supporting progress towards the Council's reduction target. Reporting on emissions is a mandatory requirement through the Public Bodies Climate Change Duties and therefore allows the Council to monitor and assess its progress on an annual basis. This reporting is monitored by the Sustainability Committee.
 - (7) The Carbon Budget will need to become better integrated with the Financial Budgets. This will provide Members with a clearer link in

demonstrating the costs and savings being met through carbon saving initiatives. This will be an important step in assisting the Council to make decisions that allow it to meet its emission reduction targets in the most cost effective way. This requires cross service working to ensure savings are captured correctly and is an ongoing process.

(8) Reaching the required reduction target of 75% by 2030 and Net Zero by 2045 will require innovation and investment as well as a desire within leadership to continue to progress towards this new ambitious target. There is a reputational risk if this is not achieved and therefore progress will continue to be monitored by the sustainability team and reported on to the Sustainability Committee for appropriate action.

1.2 All of these risks and others within the budget will be monitored and managed in order to identify any issues and address these at an early stage.

2 Budget Pressures and Significant Developments

2.1 Significant budget pressures and developments across services and the estate will have implications on the Council's Carbon Budget:

(1) Overall budget pressures across Aberdeenshire Council mean that projects which will reduce emissions may not be considered in order for the Council to reach a balanced budget. Budget reductions across services will also impact resources required for potential projects.

(2) New schools now online – they are more energy efficient but larger community campuses. Extended times of operation have therefore increased energy use. This is in line with expectations of the business case for these builds.

(3) The Scottish Government has set out plans to increase the number of funded early learning and childcare hours. At the moment, all 3 and 4 year olds, and some 2 year olds who meet specific criteria, receive 600 hours of funded early learning and childcare per year. Under the new plans, this will almost double to 1140 hours by August 2020. This will increase energy use and waste and therefore will have an impact on emission reduction targets. Once known, this increase will be included in the calculations.

(4) Further new developments, policies, procedures and strategies will need to consider climate change mitigation and adaptation in order to support progress in action across the Council. This will require an overall fundamental shift as an organisation to current practices.

2.2 All of these budget pressures and developments will be monitored in order to identify any issues and address these where possible at an early stage.

