

**Table 1: Abbreviations/Acronyms within the following table (2):**

E&CS	Education and Children Services
EfW	Energy from Waste
H&SCP	Health and Social Care Partnership
JES	Joint equipment service
kWh	Kilowatt Hour
LED	Light-Emitting Diode
LLA	Live Life Aberdeenshire
NDEEF	Non-Domestic Energy Efficiency Framework
NHSG	National Health Service Grampian
P&FM	Property and Facilities Management
RTPI	Real Time Passenger Information
TBD	To Be Determined
tCO <sub>2</sub> e	Tonnes of Carbon Dioxide Equivalent

**Table 2: Carbon Budget 2023 – 2024 Final Update**

<b>BUSINESS SERVICES</b>	<b>Proposed Identified tCO<sub>2</sub>e Savings 2023/24</b>	<b>Anticipated tCO<sub>2</sub>e Savings 2023/24</b>	<b>Final Update on Projects</b>
Upgrade Windows	19	19	Upgrade works are ongoing and part of the P&FM Capital Plan. As completed, details of each project and achieved savings will be updated.
Upgrade Roof	40	40	
Lighting Upgrades	20	20	
NDEEF – LED upgrades <i>* carried forward from 2022/23</i>		*207	The LED upgrades as part of the NDEEF project were delayed due to material supply and asbestos issues however they are expected to be completed by 31 March 2024 with carbon savings attributable to 2023/24.
<b>Business Services Total</b>	<b>79</b>	<b>286</b>	
<b>ENVIRONMENT &amp; INFRASTRUCTURE SERVICES</b>	<b>Proposed Identified tCO<sub>2</sub>e Savings 2023/24</b>	<b>Anticipated tCO<sub>2</sub>e Savings 2023/24</b>	<b>Final Update on Projects</b>
High Specification Bus Shelters - off-grid	1	1	5 x high specification bus shelters and 3 x RTPI battery powered e-paper displays installed at Peterhead Bus Station (July 2023) total cost £98k. Plan to install 3 x high spec shelters with battery powered e-paper displays at Fraserburgh and 1 x similar specification at Stonehaven by no later than 31 March 2024 at a total cost of £95k – all products are off grid and

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			combined are delivering the identified tCO2e savings.
Electric landscaping equipment – 3 more squads	TBD	Unknown	Electric grounds equipment still in use, had some technical issues obtaining the usage figures from the equipment but the feedback from the Service has been positive. Looking to extend this trial with another brand for comparison.
Two additional lease electric cars	TBD	Unknown	The two additional electric cars went into service in October.
Battery rammer to trial alongside traditional petrol machines	TBD	0	This project was not able to be progressed in 23/24.
Roads resurfacing – warm mix	220	68	Switched from hot mix to warm mix in March 23. A re-calculation was completed on actual savings being made reducing the overall emissions savings by 152tCO2e.
Reduced Greenspace maintenance	TBD	Unknown	We are unable to determine the emission savings from this project due to a lack of data.
Energy from Waste	900	1351	All waste is currently going to the NESS EfW plant during the commissioning phase. The plant is due to be fully operational by the end of August 2023. With all waste now going to EfW plant the estimate for emission saving has increased. An average of 3180tonnes of waste diverted from landfill (1419tCO2e) to EfW (68tCO2e) gives an estimated saving of 1351 tCO2e.
LED street lighting	261	190	Anticipated savings less than proposed estimate due to procurement issues. Still looking to gain a consumption saving of 944,449kWh for 2023-24, which is 11% reduction. We are experiencing issues with procurement of the lanterns. We had a delay with a framework which held up purchasing so trying to catch up from this. Now also impacted by issues in Red Sea deliveries taking weeks longer to arrive. We also have had many storms which have stopped works onsite.
Warp-It	10	6	Current savings from April – January is sitting at 5.6tCO2e.
<b>Environment &amp; Infrastructure Services Total</b>	<b>1392</b>	<b>1616</b>	

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EDUCATION AND CHILDREN SERVICE	Proposed Identified tCO2e Savings 2023/24	Anticipated tCO2e Savings 2023/24	Final Update on Projects
E&CS Energy Project	TBD	Unknown	With regard to ventilation in schools, adjustments to systems should encourage a return to lower pre pandemic levels of energy use across the educational estate in conjunction with plans being developed to support management of energy usage.
Reduction in pool temp	TBD	Unknown	Reduction in temperature of air and pool by one degree was trialled across venues with adverse customer feedback. Accurate measurements are very difficult to determine by their nature owing to mechanical plant, pool hall, air quality etc. These all vary between venues.
Heating review in smaller sites	TBD	Unknown	Heating is linked to both mechanical capability of venues, and operating hours. Operating hours were reviewed and implemented to a 70/50/40 hours per week model. Reduced operating hours results in less energy usage. Libraries and museum operating times are constantly reviewed, and halls are largely accessed by appointment. More time is required to quantify the energy efficiencies brought by these changes to operating hours, and access arrangements.
Industry assessment of main sites	TBD	Unknown	Good practices for example replacing lighting for LEDs (pool hall) using natural light, sustainable transport, photovoltaic roof panels, are all established within LLA, and with discussions with colleagues in property at the planning stages. Stonehaven LC refurbishment is a good example of this joined up thinking.
Asset rationalisation	TBD	22	Values taken from the assets currently closed per the LLA asset disinvestment strategy.
Princh Printing	TBD	Unknown	At the time of writing, this is available in libraries and has recently been rolled out to Banchory Sports Village. This service will continue to expand with the new Princh contract, which can enable up to 50 additional venues.
Digital access to resources	TBD	Unknown	A large suite of resources for all of the community are available online through the LLA website <a href="https://livelifeaberdeenshire.org.uk/live-">https://livelifeaberdeenshire.org.uk/live-</a>

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			<a href="#">life-at-home/</a> . Much of our programmed activity requires being physically in our venues, however we will continue to grow social media channels and resource libraries which encourage an active lifestyle as local to home as possible.
Update of Raw Food Policy	1	1	Policy underway.
Participatory Budget Projects in Primary Schools	TBD	Unknown	Work continuing on individual projects in schools.
Waste Strategy Project	Unknown	Unknown	An E&CS Education Waste Strategy is being drafted which will directly support the Aberdeenshire Council Waste Strategy and Route Map. The draft strategy is committed to reducing the overall level of waste within schools, by encouraging the reduction in waste which is not currently recyclable, and optimising the levels of waste which may be recycled or repurposed. The strategy will further aim to encourage the participation of young persons in the development of local initiatives and projects to enhance behavioural changes in support of waste reduction.
<b>Education &amp; Children Services Total</b>	<b>1</b>	<b>23</b>	
<b>HEALTH &amp; SOCIAL CARE PARTNERSHIP</b>			
	<b>Proposed Identified tCO2e Savings 2023/24</b>	<b>Anticipated tCO2e Savings 2023/24</b>	<b>Final Update on Projects</b>
Reduction in business miles	TBD	Unknown	Aberdeenshire H&SCP has a 20 point Travel and Transport Action Plan reflecting both staff and patient/service user travel and transport issues. The plan has a sustainability/environmental impact column reflecting each action. Our Strategic Team has been asked to help us capture data against these action areas. One of our key commitments is to reduce unnecessary business travel. This reduction was significant as a result of Covid and we must avoid the need to meet in person where this is not essential. NHSG Staff Travel Policy is currently being reviewed but maintains the requirement to not

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			<p>travel unnecessarily – e.g. for meetings. Work is ongoing with teams using vehicles and with NHSG and Aberdeenshire Council Fleet leads to explore hybrid, electric and the potential for hydrogen vehicles, recognising the geographical challenges of operating across our area and the ability to meet 2025 deadlines with insufficient infrastructure and the cost of green vehicles.</p>
Resources and Circular Economy Frameworks	TBD	Unknown	<p>Joint Equipment Service (JES): Sustainability:</p> <ul style="list-style-type: none"> <li>• 75% of currently issued equipment is recycled.</li> <li>• Current plans to improve recycling equipment performance: <ul style="list-style-type: none"> <li>- Working with Aberdeenshire housing “voids” to proactively identify properties that are becoming empty and have equipment present to try and reduce loss.</li> <li>- Working with recycling centres to identify any equipment and recovering it.</li> <li>- Recycling more equipment by partnering with a local business. This company are now also able to reupholster fabric items (clinical spec fabrics where necessary) which again extends the working life of items of equipment.</li> <li>- Training for JES technicians to upskill them so that repairs can be carried out on items of equipment that would otherwise not be economically viable to repair if contractors or manufacturers had to carry out this work.</li> <li>- Working with suppliers and manufacturers to emphasise the importance to our business model of recycling and maximising equipment working life. An example of this would be Closomat who supply JES with wash + dry toilets – we are the only authority in UK to recycle them.</li> <li>- Inclusion of questions about a suppliers environmental and sustainability credentials in the tendering process.</li> </ul> </li> </ul> <p>Environmental:</p> <ul style="list-style-type: none"> <li>• Planning routes to minimise fuel use.</li> <li>• Driver training to drive more efficiently.</li> <li>• Recently the equipment</li> </ul>

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			<p>decontamination and cleaning process was redesigned working with national infection control leads to reduce electrical and chemical requirements. This has not only saved resources but also resulted in considerable financial savings.</p> <ul style="list-style-type: none"> <li>• Consulting with Aberdeenshire Council to improve efficiency of hot water provision for equipment cleaning by rerouting pipes and removing inefficient immersion heaters from the circuit.</li> <li>• Energy survey - change to LED, hot water boiler.</li> <li>• Separating scrap and using Council recycling facilities.</li> <li>• Looking at increased “in house” servicing being done by upskilling technicians. This will not only save money on the cost of servicing but as is often the case a service user will have more than one item of equipment that requires servicing so there will be the environmental benefit of only one visit to a service users property.</li> </ul>
<b>Health &amp; Social Care Partnership Total</b>	<b>TBD</b>	<b>Unknown</b>	
<b>Grid Decarbonisation</b>	<b>500</b>	<b>0</b>	<b>The emission factor has increased. No emissions will therefore be reduced further by the electricity emission factor.</b>
<b>Total Reductions Identified in March 2023 (tCO2e)</b>	<b>1972</b>		
<b>Total Reductions currently anticipated for 2023-24 (tCO2e)</b>		<b>1926</b>	

\*TBD = Data still to be determined for tCO2e savings if consumption data can be provided by services

\*Unknown = Data is not available to be able to determine tCO2e savings