

CONGLETON TOWN COUNCIL

COMMITTEE REPORTS AND UPDATES

COMMITTEE:	Environment Committee		
MEETING DATE AND TIME	13th July 2023	LOCATION	Congleton Town Hall
REPORT FROM	Town Hall Manager – Mark Worthington		
AGENDA ITEM REPORT TITLE	10 Town Hall Decarbonisation Report		
Background	<p>This paper was taken to the Town Hall Assets and Services Committee on 6th July 2023</p> <p>As part of the initiative to reduce the carbon footprint and overall energy usage at the Town Hall, Officers worked with Tomson Consulting in 2022 to create a Town Hall Decarbonisation Report to highlight areas for improvement and options to investigate. A site visit of the Town Hall was completed by Tomson Consulting in May 2022. The purpose of the site visit was to assess the existing type and condition of building fabrics, space and domestic hot water heating systems, lighting, and lighting controls. Observations and measurements were used to identify and start to quantify potential opportunities to reduce greenhouse gas emissions. Following the site visit a summary progress update was provided which detailed initial findings and identified opportunities to reduce carbon emissions around the Town Hall.</p> <p>The aims of the project were to:</p> <ul style="list-style-type: none">• Identify practical and potentially cost-effective opportunities to reduce carbon emissions associated with electricity and heating fuel consumption at the Town Hall• Appraise potential opportunities against site-specific requirements, the listed status and unique appearance of the Town Hall, potential energy and carbon savings and the estimated cost-benefit of improvements• Identify at a high level the potential costs, financial and environmental benefits of carbon reduction measures• Understand what, if any, measures could be applicable for financial support through the Public Sector Decarbonisation Fund (PSDCF) or similar <p>The Town Hall Decarbonisation Report provided by Tomson Consulting highlighted areas where a number of improvements could be implemented within the Town Hall to reduce the carbon emissions of the building and also help to reduce costs. Officers identified the low cost/easy to implement recommendations and have put these into place while researching the more technical recommendations within the report.</p>		

Update	<p>Improvements recommended in the Tomson Consulting Town Hall Decarbonisation Report are being researched and implemented where possible and we are also working alongside a local independent decarbonisation expert who has kindly offered their time and expertise on a voluntary basis.</p> <p>Work implemented since receiving the report are below:</p> <ul style="list-style-type: none">• Improve understanding and use of the space heating control system. Currently the Grand Hall acts as the temperature control for the entire building• relocation of the space temperature sensor in the main hall. This was providing the heating system with an inaccurate gauge of the Grand Hall temperature• insulating heating and hot water pipework around the Town Hall, facilitated by the inhouse teams• Timers installed to the water heaters which provide hot water for the Commercial kitchen and main hall toilets. The new timers enable improved control of the water heating to match the demands of the users, significantly reducing the electricity consumption as previously, the water heaters operated 24 hours per day• Installation of LED lighting as this need to be replaced <p>Research into other possibilities to reduce the carbon footprint is ongoing and include the projects below:</p> <p>Central heating re-configuration</p> <p>The gas fired central heating system is currently run in a 100% manual mode with no effective control in different locations around the Town Hall building; resulting in some areas being overheated (the Offices) and other areas feeling cool (the Main Hall) as well as impacting significantly the purchase of gas. The space temperature sensor in the Main Hall has now been moved to a correct location and is providing a more accurate reading for the entire space. The building services contractor has visited site and has confirmed that the 3-way control valve and isolating valves are functioning, and hence the heating system can be reconfigured to better serve the whole building. It is proposed to add an additional space temperature sensor in the offices in a location to be decided to enable dual heating zone control, reducing operating costs and improving comfort. The price estimate to reconfigure and re-commission the heating control software is £3,700.00 plus vat. The installation of a second temperature sensor is awaited.</p> <p>Congleton Museum Solar power</p> <p>A quotation has been received to install Solar Panels on the roof of the Museum with a view to powering the existing air conditioning units. This is a practical solution to reduce electricity consumption particularly in the summer months when cooling is a requirement.</p> <p>Due to the use of slate roofing tiles on the roof, an additional quotation is being sought for a roofing contractor to provide scaffolding and to remove the existing tiles and</p>
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	<p>replace after the installation of the panels. The quotation for the solar panels install and commission is £12,000 plus VAT. The quotation for scaffolding and tile removal / replacement is awaited.</p> <p>Paddling Pool solar power</p> <p>There is an opportunity to provide solar power to the paddling pool pump house, either by mounting on the small paddling pool building itself, or by taking a feed from a potential new installation on the roof of the Visyon building owned by Cheshire East. This opportunity is in early days discussions with Visyon / Cheshire East.</p> <p>Replacement heating system for the Town Hall</p> <p>Whilst it is accepted that this project would be a longer-term activity due to the commercial scale to install an Air Source Heat pump or similar system, the drive towards nett zero means that current Government guidelines indicate that domestic gas boilers for new build houses will be phased out from 2025, and banned from 2035, with the same timeline being applied to commercial locations should suitable alternatives be available. This may make future repairs more difficult, and certainly, any plan to replace with new boilers in the medium term is more challenging.</p> <p>Secondary glazing to the front elevation windows</p> <p>The eight windows to the front elevation of the town are known to be draughty and cold, resulting in significant heat loss. Three companies have been approached who have experience in secondary internal glazing to listed buildings, quotation estimates in the region of £25,000 to £30,000 plus vat have been received, and a confirmed quotation of £26,000 plus vat has been received following a site survey and measurement. Due to the need for a frame to be installed to hold the secondary glazing, the existing wooden window sills will need to be skimmed to lower them by approximately 10mm to enable the existing external windows to be opened when the secondary glazing is opened. An additional feasibility quotation is being sought from a local provider to complete the skimming work. An approach will also need to be made to establish if listed building consent is required prior to the works being commenced.</p>
<p>Decision Request</p>	<p>To receive the report relating to Town Hall Decarbonisation.</p>