

# TONBRIDGE & MALLING BOROUGH COUNCIL

## OVERVIEW AND SCRUTINY COMMITTEE

29 June 2023

### Joint Report of the Chief Executive and Director of Central Services

#### Part 1- Public

#### Matters for Information

### 1 **DECARBONISATION AND ENERGY EFFICIENCY AT LEISURE TRUST SITES**

**To provide an update on energy efficiency measures and renewable energy installations at Leisure Centre sites, and potential future options to reduce carbon emissions.**

#### 1.1 **Background**

1.1.1 At its meeting in July 2019 Full Council declared climate change and biodiversity emergencies, and committed to the aspiration of carbon neutral for Tonbridge and Malling by 2030. TMBC's Climate Change Strategy 2020-30 sets out areas for action, including reducing emissions from TMBC's own estate and working with the Leisure Trust to bring forward action plans to address climate change issues. More recently the Conservative Party made an election pledge for leisure facilities to be carbon neutral by 2027.

1.1.2 The current Management Agreement with the Leisure Trust includes an obligation for the Trust to use all reasonable endeavours to minimise its consumption of energy and mitigate its environmental impact. While the Trust has operational responsibility and control of the sites, the Management Agreement also makes clear the ongoing collaboration between the Council and the Trust regarding energy management systems. This has resulted in schemes being developed in collaboration primarily based on specialist external reports commissioned by the Council. Recent examples are included later in this report.

1.1.3 This report provides an up-to-date snap-shot of the scale of energy consumption and greenhouse gas emissions from the Leisure Trust, energy efficiency works carried out to date, and future projects.

#### 1.2 **Improving energy efficiency**

1.2.1 Energy consumption, energy costs and associated greenhouse gas emissions at the Council's leisure centres are significant, accounting for almost two-thirds (63%) of total greenhouse gas emissions from the TMBC estate and operations. Providing important local services, such as swimming pools, can mean energy-hungry operations, with the two sites with swimming pools (Larkfield Leisure

Centre and Tonbridge Swimming Pool) accounting for 79% of total gas consumption, and 73% of electricity use at the sites operated by the Leisure Trust. As such it is important for costs and environmental commitments that building fabrics and operational technologies are as efficient as practically possible.

- 1.2.2 Reducing energy usage while maintaining or improving service provision requires addressing the efficiency of building materials and operations. The Council has a history of helping to tackle leisure centre energy use, including investing in pool covers and variable speed drives, which help regulate the power of pumps and motors so they run more efficiently. The Council also invested in improved roof insulation at Tonbridge Swimming Pool during roofing works and in the replacement of the leisure pool hall roof at Larkfield Leisure Centre.
- 1.2.3 As ongoing policy across all Council operated buildings, when major plant and equipment is updated, the modern equivalent is always more efficient than its predecessor; and whenever a light fitting fails, an LED replacement will be installed. To accelerate reductions in electricity use for lighting at the most energy-hungry sites, the current financial year capital plan provides for the installation of LEDs throughout Tonbridge Swimming Pool and Larkfield Leisure Centre where old fittings are still present.
- 1.2.4 The Trust through its contract arrangements with Laser energy has detailed ½ hourly usage figures for both gas and electricity for its main sites. This level of access to the data allows the Trust to monitor its usage and make more educated operational decisions based on these figures. The Trust also manages energy usage through good housekeeping practices including the use of pool covers installed on its standard tank swimming pools, turning off lights in areas that are out of use and the staged turning on and off of equipment at opening and closing times in the gyms it operates. These practices are part of the standard induction process for all members of staff.

### **1.3 Renewables installations**

- 1.3.1 After efficiency measures have minimised the energy needed to meet service requirements, emissions from energy use can be reduced by fuel switching (i.e. changing from a fossil fuel to a renewable energy source). The Council has invested in renewables and heat pump technology at two Leisure Trust sites.
- 1.3.2 The Council completed the construction of a new café facility at Leybourne Lakes Country Park in June 2022, which incorporates solar panels and a water source heat pump.
- 1.3.3 At Larkfield Leisure Centre, which offers a wide range of services and accounts for 46% of Leisure Trust electricity consumption, the Council invested in a solar panel installation that was completed in February 2023. The solar array will be generating approximately 90,500 kWh and reduce emissions from the site by around 19tCO<sub>2e</sub> per year. However, this will only meet around 6% of the centre's

annual electricity consumption, indicating just how much energy leisure centres, especially those with multiple swimming pools, require to operate.

- 1.3.4 As it is not technically feasible to meet all electricity demand at sites with swimming pools through on-site solar generation, decarbonising electricity use could be achieved through moving to a renewables contract with the energy supplier. However, discussions between the Council and Leisure Trust concluded that the additional cost of a REGO (Renewable Energy Guarantee of Origin) contract was prohibitive in the context of rising energy bills and given the scale of electricity consumption at leisure sites.

## **1.4 Next steps to decarbonisation**

- 1.4.1 Further Council investment in renewables is progressing. In the current financial year there is a capital plan scheme to install solar panels on the roof at Tonbridge Swimming Pool. Following initial scoping assessments, we are working with Laser to provide a detailed survey in June 2023. Current estimates, subject to survey, suggest that solar PV could provide around 50 -60 kWp, which again would meet only a limited percentage (less than 10%) of electricity demand at the site.
- 1.4.2 In order to make significant reductions in carbon emissions at the leisure sites, a move will have to be made away from gas as the primary heating fuel. In most instances this will involve investing in some form of heat pump technology, which can be both technically challenging and costly.
- 1.4.3 Carbon descent plans for both Larkfield Leisure Centre and Tonbridge Swimming Pool recommended the installation of air source heat pumps. Following endorsement by 8 February Communities and Environment Scrutiny Select Committee, we are currently engaging with a specialist company to design these systems to get a better understanding of the potential installation cost and associated carbon reductions as well as aiming to use the designs to apply for future government grant funding.
- 1.4.4 Initial indications are that the costs of installing heat pump technologies are significantly beyond the means of the Council and/or the Leisure Trust. For example, the Carbon Descent Plan estimate for an air source heat pump at Tonbridge Swimming Pool entailed a capital cost of £1.14m. Advancing decarbonisation at the most energy-hungry, and significant carbon producing sites, therefore relies on external funding.
- 1.4.5 This year we are preparing to bid for two decarbonisation funds: the Swimming Pool fund announced in the March 2023 Budget and managed by Sports England, and the Public Sector Heat Decarbonisation Fund, which should open for the next Phase of applications in Autumn 2023. However, these grants are massively oversubscribed resulting in low success rates.

## **1.5 Legal Implications**

1.5.1 The matters raised in this report are considered to be routine, uncontroversial or not legally complex and a legal opinion has not been sought on these proposals.

## **1.6 Financial and Value for Money Considerations**

1.6.1 The projects discussed in sections 1.2 and 1.3 have been assigned funding. Planned scoping and assessment work will provide better estimates for heat decarbonisation in the coming months, after which implications for funding and value for money will be investigated and brought forward for Member's consideration at an appropriate meeting.

## **1.7 Risk Assessment**

1.7.1 TMBC has committed to aiming for carbon neutral in 2030 and councils are increasingly being assessed and held to account by external academic and voluntary organisations on their progress towards publicly stated climate and environmental goals. There is a reputational risk of inaction on tackling the most significant sources of energy consumption and carbon emissions under our influence.

1.7.2 Because of just how much energy is required to operate swimming pools it will be challenging to achieve carbon neutral buildings through retrospective enhancements to building fabric and plant and equipment. A remaining proportion of carbon emissions will most likely have to be dealt with via 'off-setting', with potential further reputational and cost implications.

## **1.8 Policy Considerations**

1.8.1 Climate Change

Background papers:

Nil

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