

Agenda Item	9
Report No	CCC/06/22

HIGHLAND COUNCIL

Meeting: Climate Change Committee

Date: 3rd November 2022

Report Title: Energy Benchmarking of Property Estate

Report By: Executive Chief Officer Performance and Governance

1 Purpose/Executive Summary

1.1 This report sets out the proposed project to undertake an energy performance benchmarking assessment for the Council's property portfolio.

2. Recommendations

2.1 The Committee is asked to:

- i. Approve the progression of the proposed project and the distribution/awareness of the associated information deliverables.

3 Implications

3.1 **Resource** - delivery of the project will require technical and data management staff resource from the Council's Energy Team, noting an associated opportunity cost regarding their availability for other workstreams.

3.2 **Climate Change / Carbon Clever** - the project deliverables would directly support and inform decisions with regard to achieving net zero, investment in buildings (to improve Energy/Net Zero performance) and asset rationalisation considerations.

3.3 **Risk** - Failure to accurately understand the current energy performance of our buildings reduces the ability to manage the estate effectively and efficiently.

3.4 **Legal, Community (Equality, Poverty and Rural), Gaelic** - There are no implications arising from this project.

4 Background

- 4.1 Energy use benchmarking is a process that either compares the energy use of a building or group of buildings with other similar structures or looks at how energy use varies from a baseline. It informs organisations about how and where they use energy and what factors drive their energy use. Benchmarking enables energy managers to determine the key metrics for assessing performance, to establish baselines, and to set goals for energy performance. It also helps them identify building upgrade opportunities that can reduce expenditure by lowering energy and operating costs, and it facilitates continuous improvement by providing diagnostic measures to evaluate performance over time, e.g. the effectiveness of implemented projects.
- 4.2 Benchmarking energy performance helps identify best practices that can be replicated, either within a building or across a portfolio of buildings. Benchmarks can be reference points for measuring and rewarding good performance. Potentially they allow an organisation to identify top-performing facilities for recognition and to prioritize poorly performing facilities for remedial action.
- 4.3 To date the assessment of energy performance of the estate has been limited in scope and detail and has not provided all the associated benefits available.
- 4.4 Over the past 9 months work has been undertaken to improve the accuracy and completeness of utility and relevant building related information and we now have a dataset which is fit for purpose to be used as part of detailed analysis.
- 4.5 It should be noted that benchmarking in itself does not directly reduce energy consumption but provides the informed basis for justification of either behaviour change or investment in remedial works to realise savings in costs and energy.

5. Project Proposal

- 5.1 Utilising the [Scottish Public Sector Energy Benchmarking Tool](#), developed and published earlier this year, an evaluation of energy performance for all main properties within Highland Council property estate will be undertaken.
- 5.2 The evaluation will compare relative energy performances to Scotland-specific energy benchmarks for public sector buildings, derived from historic energy use data. Benchmarks shall be tailored, where information permits, to enhance the assessment process. Potentially factors could include
 - Year of construction
 - Primary fuel for heating
 - Sheltered/ exposed location
 - Low carbon technologies and renewables
 - With or without a building management system (BMS)
 - With or without thermal fabric retrofit measures
 - Various heating, ventilation, and air conditioning types
 - Various heat distribution systems
- 5.3 The deliverables of the proposed project are as summarised below
 - Summary report detailing resultant performance metrics and assessments;

- Ranking tables of best and worst performers for primary building types;
- Investigation of instances of particular note, including liaison with the Property Service and at site level;
- Provision of scoring metrics for individual buildings for use in asset rationalisation considerations;
- Analysis of high resolution (30 minute) data for selected sites, particularly focused on intensive users, such as leisure facilities.

6 Proposed timeline

- 6.1 Finalisation of report and associated deliverables would be completed by March 2023. It is envisaged that ongoing work, in terms of communicating and liaising internally within the Council, would continue beyond this date, however this would fall within the normal remit of the Energy Team as a 'Business as usual' function.

Designation: Executive Chief Officer – Performance & Governance

Date: 23 October 2022

Author: Ronnie Macdonald