

# Policy on In Use Monitoring

## **1.0 Policy Reference**

This policy document refers to the following aims outlined in The Highland Council's Energy Management Performance Plan:

- Reduce the council's energy use by 15%
- Save £3.8M in energy costs
- Reduce CO<sub>2</sub> emissions by a minimum of 15%
- Increase the installed capacity of renewable energy by a minimum of 4,000kW

## **2.0 Introduction**

Due to financial and environmental constraints The Highland Council's Energy and Sustainability team regularly monitors the energy used within its building stock and are working towards reducing the energy consumption of all its buildings but primarily those buildings which consume the greatest amount of energy.

As a result The Highland Council also wants the Design Consultant to monitor the energy performance of all new and refurbished buildings during the 12 month 'defects' period following completion of a project. This In-use monitoring will determine whether the building is performing as expected and help highlight any issues with the M&E Services.

## **3.0 Purpose**

The Highland Council's Top 100 energy consuming buildings are monitored to ensure that there energy usage does not increase while the buildings within the Top 40 for energy consumption are regularly monitored and graphs created of there energy consumption. In the near future measures are to be put in place to reduce the energy consumption of these high use buildings.

The Councils bill management system also highlights when a building has a sudden increase in energy consumption, this is then investigated and the reason for the sudden rise noted on the billing system.

The implementation of In-use monitoring on newly completed projects will help develop and grow the council's monitoring systems and information database while ensuring a reduction in its energy use.

## **4.0 Procedure**

Alternative monitoring equipment will be installed if there is no BEMS installed within the building i.e. within a domestic property.

The Design Consultant must consider this and design the systems accordingly; accounting for the installation of monitoring equipment at design stage, where possible.

The Highland Council can provide Testo Data Loggers (or equal and approved); these will be installed within a domestic property prior to the new system being installed. The data from this

along with periodic meter readings which the council will take prior to the new M&E systems being installed will create an energy usage log for the existing system which can then be compared to the energy usage log for the new M&E systems, using the same method.

## **5.0 Reporting**

Monthly reports detailing the findings of the In-use monitoring during the 12 month 'defects' period will be submitted to the Energy & Sustainability Team at The Highland Council. The findings of these reports will be collated and published on the Highland Council's website, within the Energy & Sustainability section.

A copy of each report will also be added to the 'In-use Monitoring' section of the O&M Manuals held within the property.

The energy usage load for both the old and new systems within domestic properties will be logged and reported on; details of the energy savings generated from installing new energy efficient systems will be collated and reported on.