Utilise your Summer Planned Preventative Maintenance to install a SMART monitoring system.

Introduction

We are already seeing visible effects on the world with the changing climate, from hotter temperatures, rainfall patterns changing, more extreme weather in general, and the increased risks of fires and floods. The level of climate change will depend on how quickly we can cut emissions across the world. If nothing is done, we could likely exceed 2 per cent of warming by the end of this century.

So where does our role come into play? And what can we be doing to reduce our carbon emissions?

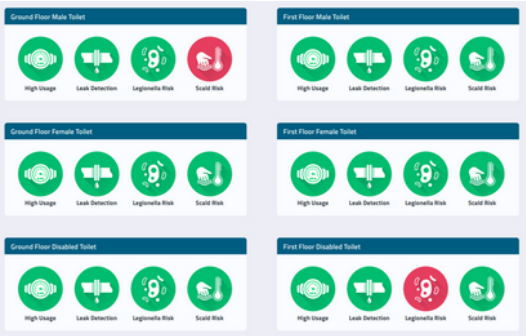
Preparing and planning in advance can save you time, money, and stress and prevent business downtime. If we start thinking about maintenance regimes for the summer months now, we can also look at ways that will have a significant impact on reducing your carbon emissions.

Go a step further and implement Condition Based or Business Focused Maintenance

Over the years, maintenance functions have drastically evolved with the growth of technology and have enabled engineers to maintain plant to maximise its effectiveness. The building services industry's standard specification, SFG20 is used as a guide for maintenance on a like-for-like basis but the use of this generic advice can mean that some plant is maintained when it may not need it.

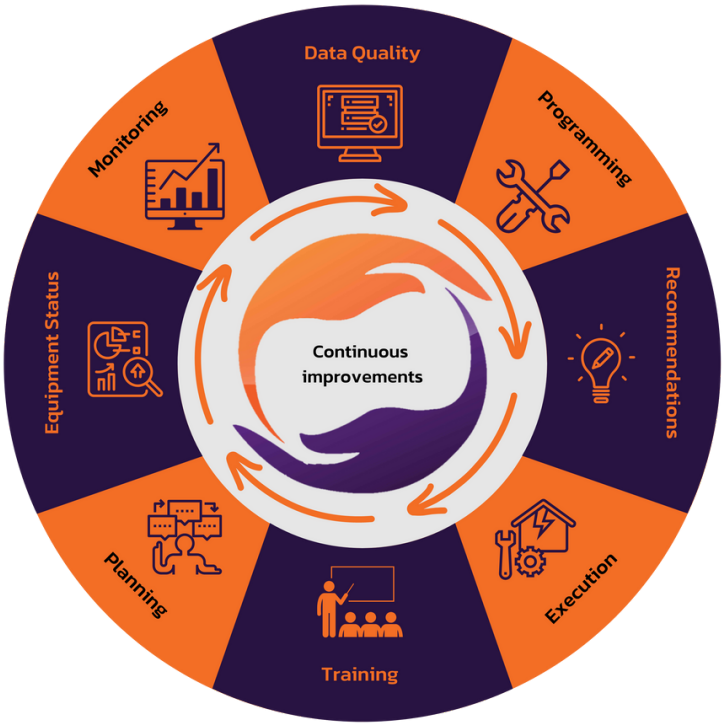
Condition Based Maintenance (CBM) allows for information to be collected using smart sensors through a condition monitoring process. The health of the plant can be assessed and can detect changes that may indicate damage or degeneration. Maintenance can be organised around this data. An example could be monitoring pressure readings on equipment with water systems. Monitoring pressure levels allows our engineers to identify when and where a leak is likely to occur before it happens, instead of at the point of failure.

Business Focused Maintenance (BFM) identifies where plant maintenance can be utilised as a means of ensuring that a business function is maintained using a more pragmatic approach.



Only Artificial Intelligence (AI) can deal with the volume of data and the ability to process and then learn from it at an unmatchable rate to human skills. The analytics allows for a much faster process of a lot more information, and deep learning enables AI to make deductions and predictions. These can then be fed directly into controllers to make necessary alterations to a system, in a fraction of the time it would take a human to respond and can allow for monitoring the site remotely, therefore if a problem was to arise, it could be dealt with before a reactive call out is raised. This means the overall response times become more rapid.

The importance of drainage maintenance during the winter to help you achieve net zero goals.



Updating the system with SMART monitoring

HVAC systems are a primary source of energy costs for any facility. A system that is running inefficiently can cause a rise in energy costs, a reduction in production, and a decrease in fuel use efficiency.

Organisations expect the reliability of building services to improve, increasing the requirement for better maintenance regimes.

The summer months are the perfect opportunity to look at installing the sensors which can be implemented alongside your current maintenance regime. Your heating equipment will not be running at full capacity and offices are quieter during the holiday summer season. It will ensure your plant is working at optimum efficiency as well as the prevention of interrupted service. Checking the whole of the systems during installation will support the management of utilising less fuel, water or electricity to maintain needed heat, cooling or pressure.

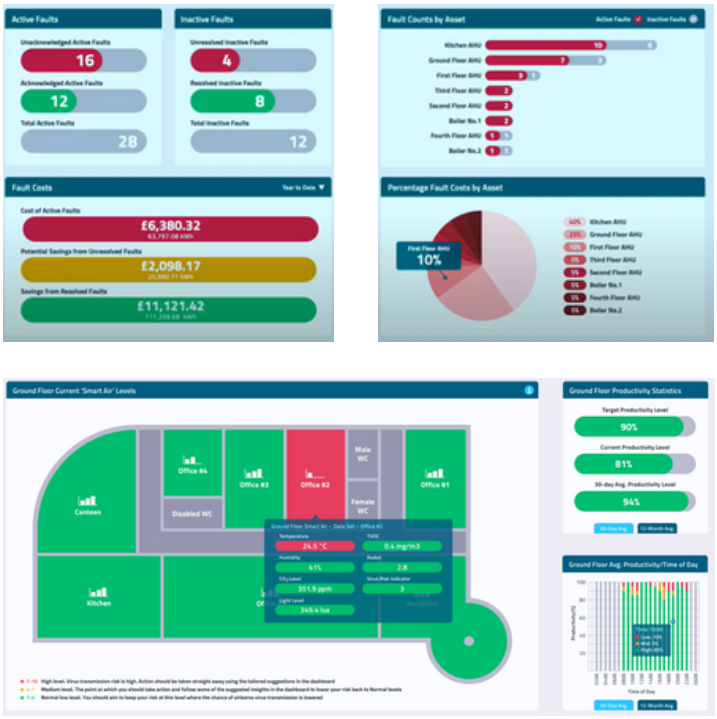
Following the installation, a future scheduled maintenance strategy can be built that allows us to inspect and spot anomalies in equipment and trigger timely follow-up orders. AI-powered work order reports would be produced to take the next step and predict which work orders will lead to asset failure.

Predicting when an asset will need replacing can be built into a project replacement plan using the data collected. This can ensure plant is being utilised to its maximum capacity, keeping in line with the company's carbon reduction plan.

The importance of drainage maintenance during the winter to help you achieve net zero goals.

How can MS help you?

Our Smart monitoring system can combine CBM and BFM for our clients and prepare a maintenance schedule around business operations and the condition of the plant. It will enable the business to stay up and running with little or no disruption, minimise risk, maximise the efficiency of the plant, keep energy costs to a minimum and extend the life of the plant within a building. By knowing the exact needs of every piece of equipment, spare parts and human resources can also be better anticipated. Migrating to using this process can reduce the need for regularly scheduled engineer visits and reduce costs for the client.



We are able to complete a full installation through to handover and into the operation and maintenance phases of your building. We aim to support you to optimise your building's performance, reduce energy consumption, and improve occupant comfort.

The comprehensive collection of data via the BMS with the capacity for remote monitoring enables us to constantly update information in real-time, allowing for guided predictive maintenance and optimising repair strategies.

At our client sites where we have implemented our SMART system, it has enabled us to identify existing inefficiencies and offer energy-saving initiatives in line with their business's Carbon Management Program.

If you are interested in working with MS and would like more information about our SMART system, please get in touch with one of our team today at enquiries@msmsolutions.co.uk