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Ergotron’s JUV™ Wall officially launches in EMEA

Ergotron

JUV™ product family aims to help customers rejuvenate and optimise their spaces to inspire employees through active work environments that support health and wellbeing ...

Ergotron, a global movement company focused on designing and manufacturing kinetic work environments, today announced that the JUV™ Wall product range is now available in the EMEA region. The award-winning range, which previewed at last year’s Orgatec world trade fair for working environments in Cologne, following its debut in the US at NeoCon 2018, the leading show for work design solutions, inspires movement and creativity in office designs, maximising underutilised spaces.

Designed with Ergotron’s patented Constant Force™ technology, the non-electric JUV™ Wall mount supports agility by allowing users to move quickly and quietly from sit to stand, eight to ten times faster than traditional height-adjustable tables. It offers the full BIFMA ergonomic range – an industry-first for a non-electric adjustable surface – and is built with a fully concealed cable management system, giving users instant access to power and data without sacrificing aesthetics.

The announcement of JUV™ Wall’s launch in EMEA comes as businesses become more aware of the positive impact of well-designed workspace solutions on employee health and productivity, considering the role that technology plays as well. “Today’s innovative work environments are characterised by multifunctional layouts, collaborative spaces and continuous evolution of the deployed IT equipment. We understand these modern workplace requirements and we further support the user by bringing technology to the point of use, making sure that their health and wellbeing is improved in the process,” said Paul Zuidema, Ergotron’s Managing Director, EMEA.

“JUV™ brings fresh energy into the workplace, not only through the rejuvenation of otherwise unused or overlooked spaces in work environments, but also helping businesses meet corporate health and wellbeing objectives by integrating natural movement into employee workspaces.”

JUV™ Wall range is available in a variety of size and colour combinations; the JUV™ engine in Graphite or Snow White, and the worksurface in Birch Wood or Icy White. Customers can always stay connected and work efficiently, thanks to direct access to power and charging adding the special JUV™ power accessory. Next to that, they can complete their ergonomic experience with the monitor riser accessory available for up to two computer screens.

Learn more at www.ergotron.com/pro

Vericon launches innovative new device to enable connected boiler control

Vericon

Vericon Systems, a leading provider of building management systems and technologies, has launched BCM:Connect, an intelligent universal device that monitors a boiler’s health and status in real time, and predicts when it might fail to allow preventative maintenance to ensure it is working when needed most.

Especially targeted at Housing Associations and those with direct responsibility for their tenants’ welfare, the device records and sends intelligent performance data to the cloud or management system, such as Vericon’s VS Connect Portal, where it can be interrogated and analysed to predict and identify common failures such as low pressure, loss of gas and even a frozen condensate pipe. Through deep integration with external sensors the device also has the ability to report environmental concerns such as damp and mould.

Utilising a sophisticated anonymised community learning system, as the amount of data collected and interrogated increases, for example to scan multiple clients, the machine learning algorithms within VS: Connect highlight correlations between boiler sensor fluctuations and potential faults. These correlations can then be flagged by the system, allowing resource to be proactively scheduled or in the event of a failure, a far greater likelihood of a first time fix being achieved.

BCM:Connect enables the boiler to be tested and managed remotely, without the cost of an engineer attending site. Boilers can also be deactivated and reset remotely, and there is also the ability to remotely alter the heating temperature and domestic hot water temperature.

The innovative cellular device is easy to fit in under 10 minutes and is simply mounted adjacent to the boiler thus not affecting any boiler warranties or safety qualifications. It connects in the same way as a traditional smart thermostat without any dependence on an occupants Wi-Fi network.

Bernard Cook, Managing Director at Vericon Systems, says BCM:Connect offers a number of key benefits: “Boilers are an essential part of any household or building’s heating or water systems. Making sure they are working efficiently and at optimum capacity, along with predicting when they may fail can be a real challenge. Yet the impact of a broken boiler in a domestic property, care home or indeed any building that requires the constant availability of hot water can be more than an inconvenience; it may also be a risk to health.

“Interacting directly with the boilers control bus allows the device to perform a range of actions not possible with a read-only Smart Thermostat. Utilising our smart technologies, BCM:Connect creates greater efficiencies for housing providers, building managers and tenants alike. Preventative maintenance programmes can be put in place that not only save money in the long term, but also ensure legal and regulatory compliance is consistently maintained.

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Condair configure - new humidifier selection tool

Condair is launching a web based humidifier selection tool, which enables AHU customers to design a humidification system from within the AHU company’s own in-house AHU design software. The software module, called Condair Configure, allows manufacturers to design and quote AHUs with a humidification element more quickly and easily, without needing to liaise directly with a Condair sales engineer.

As the system is web-based, any humidifier project design can be updated and revised whenever necessary, no matter what time of the day or night.

The API-based system is connected to Condair’s own global in-house product selection software, called HELP, so it is constantly updated over the internet with all the latest product details. The features available within Condair Configure include humidity load calculations to correctly size a humidifier, product selection including accessories, pricing, detailed product data, drawings, wiring diagrams and performance sheets.

Condair Configure can even provide advanced calculations, such as pressure drops inherent with any given system design, calculation of steam absorption distances, the pre heating requirements for cold water humidifier projects and any chosen system’s power consumption.

The communication between the AHU company’s IT system and Condair Configure is one-way only, so no project information is fed back to Condair until the AHU company chooses to do so, at an appropriate stage of the project.

Condair Configure is free to use, secure and easy to integrate, with documented source code and a developer manual. Condair supports the AHU company during the integration phase, with free developer-to-developer support. The Condair IT team works with the AHU company’s internal IT team to set up the connection and ensure both systems talk to each other seamlessly.

The Condair Group is the world’s leading specialist in humidity control and evaporative cooling, with energy efficient, hygienic and innovative technologies for commercial, industrial and heritage applications. Condair offers system design, manufacture, supply, installation, commissioning, maintenance and spares. You can find out more by visiting the company’s website at www.condair.co.uk.

Robertson builds momentum on £9.5M extension to Islay Distillery

Robertson

One of Scotland’s best known whisky brands is making significant progress on an expansion of facilities at its island home.

Robertson is delivering a £9.5million extension at Bruichladdich’s headquarters on Islay as the firm expands operations to handle increasing demand for its products.

It comes after Robertson completed a £4m job for Bruichladdich in late 2018, delivering a new warehouse for the company.

The latest phase of work will see Robertson build two further bonded warehouses. Enabling Works began in May and were delivered by Robertson Civil Engineering, while Robertson Specialist Division will be responsible for the render and internal decoration. The project is due to complete next spring.

Since beginning work on the main construction programme in the summer, Robertson has completed all structural steel frame works. The internal fit out has begun while work on the concrete floors will commence shortly.

Ed Parry, managing director, Robertson Central West, said: “We are committed to supporting projects on Scotland’s islands and across Robertson we have a successful track record of delivery on Orkney, Skye and Islay.

“We have developed a strong relationship with Bruichladdich through our previous contract with them and this new work shows that they have faith in our ability to deliver for them. We’re excited at the progress being made, with the ultimate aim of helping Bruichladdich ensure its spirits can continue to reach a global audience.”

Bruichladdich – owned by Rémy Cointreau – is the largest private employer on Islay with 84 people working at the distillery. A further 20 are based at the brand and distribution office in Glasgow.

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The Future Office Awards open for entry

A first of its kind award ceremony has been launched by London-based office fit-out specialists, ThirdWay celebrating the changing workspace. The winner of this future-defining award will receive £100K towards their office fit-out, designed by the best in the business.

The modern workplace is evolving. Businesses are realising the potential of creating an office environment that puts its people and values first. By investing in space that keeps employee wellbeing at the heart of it, companies across the world are enjoying the results of boosted productivity, improved team morale and a culture everyone wants to be part of.

To recognise this, and to celebrate ThirdWay’s decade in the industry, the Future Office Awards will award one company £100K to put towards a space that truly reflects their culture, empowers employees and promotes wellbeing, morale and increased productivity.

Entries are now open to companies looking to refurbish or relocate in the next 18 months. Entrants simply have to fill out a short form explaining why they deserve to win.

Entries close 13th December 2019, with the shortlist announced in January 2020.

The award-giving night itself takes place in March 2020 at the Truman Brewery in London’s Spitalfields.

Guests should expect an awards night like no other. Forget tuxedos and long speeches and instead think immersive, explorative and unique – an experience that will push guests to consider what the future of workplace feels like.

Guest judges announced so far include Alex Hudson (pic 2), Deputy Editor Of The Metro, Devinder Bhogal (pic 1), Head of Workplace Strategy at Deloitte and Stephen Attenborough (pic 3), Commercial Director at Virgin Galactic. Representing ThirdWay on the panel is Ben Gillam, Owner and Founder, Vicky Kingsnorth, Marketing Manager and Rob Walsh, Creative Director.

Entries are now open: https://futureofficeawards.com/

Evolution Adds To Sales Support Team

Jamie Grainger has joined the Sales Support team of Evolution, the integrated fire and security solutions business, to provide dedicated account management and customer support to the company’s clients across the UK.

Jamie arrives at Evolution with more than five years of sales experience working in the security and access control sectors. Most recently he worked for an international technology company as a Project Sales Specialist, focusing on all-round system design and project management.

Jamie says it is an exciting time to be joining Evolution: “The business continues to grow and expand, winning some large projects and clients across the UK & ROI and in Europe.

“I’m keen to learn as much as I can from the team and contribute to driving further growth for the business by providing dedicated account management and support to our customers.”

Richard Lambert, Managing Director at Evolution, says: “I’m pleased to welcome Jamie to the team, he has a solid foundation of knowledge in the industry and will provide a valuable additional contact and resource for our clients.”

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Cities lead fight against climate change and renewable energy - report reveals

"It might come as a surprise to some, but it is a pattern that we now find everywhere in the world: Cities are driving the transition towards renewable energy. They understand that renewables mean less lung and heart diseases, more local jobs and relief for the municipal budget," says Rana Adib, REN21's Executive Secretary. "If cities alone were to decide, today’s climate and energy politics would look totally different."

"Fossil fuel centered economies made it difficult for national governments to put climate concerns front and centre, with the result that globally we are not on track to meet the Paris Agreement. This truth is hard to face. The Emissions Gap Report 2019 that our partner UNEP releases today shows the harsh reality: countries collectively fail to stop growth in global greenhouse gas emissions. The gap between targets and reality is only growing. Deeper and faster cuts are required now, and cities can take climate action into their own hands," says Rana Adib.

By November 2019, almost 1,200 jurisdictions and local governments in 23 countries had declared a state of climate emergency. Almost 10,000 have already adopted carbon emission reduction targets, many of which linked to renewable energy, notes the newly released report.

First ever Global Stock-taking of Cities’ Efforts to Transition to Renewable Energy

Many countries still expect that the implementation of 100% renewable energy systems will take several decades. Yet, there are plenty of cities in the world that already today source 100% of their electricity from renewables. Now, they are taking steps to expand their ambitions to get rid of fossil fuels in heating, cooling, transport and industry.

The report shows that more and more cities in Europe take the energy supply back into their own hands by re-municipalising energy companies or forming new ones. Barcelona Energia, recently formed to supply locally produced renewable energy to the city’s inhabitants and municipal facilities, is just one example. In 2000, Barcelona was also one of the first European cities to require all new and renovated buildings to use solar energy to supply a minimum of 60% of a building’s running hot water needs. The next project in line is a solar cooling network which is expected to start operating by the end of 2019.

Renewables could Save Millions from Premature Death

"An important message from the report is that many cities understand that they are directly suffering from the burning of fossil fuels. Shifting to efficient and renewable energy systems is the only way out,” notes Adib.

One of the most powerful motivations is air pollution. Particles and other air pollutants from fossil fuels literally asphyxiate cities. They barely measure a fraction of the diameter of a human hair, but according to studies by the World Health Organisation, their presence above urban skies is responsible for millions of premature deaths and costs billions. Health damages by road traffic alone cost the European Union around 62 billion euros a year.

Mr. Ban Ki-Moon, former UN Secretary General and Chair of Korea’s National Council on Climate and Air Quality underlines the link between burning of fossil fuel and citizens’ health. "Unsustainable and reckless consumption of energy has led to concerning levels of air pollution, making it the fourth-largest threat to human health and the single biggest environmental health risk that we face today. Against this background, transition to a cleaner and more sustainable energy model is no longer a choice but a must. Cities can spearhead progress in combating air pollution, by implementing creative policies and incubating innovative ideas, like what the Seoul Metropolitan Government is doing. We have the necessary means to pursue energy transition. All we need is the political and institutional will to make the transition into reality."

Like Seoul, Barcelona, Berlin, Copenhagen, Heidelberg, Lisbon, London, Madrid, Paris, Rotterdam,Stockholm and Warsaw have all pledged to set new air quality standards that meet or exceed existing national targets within two years. When signing the declaration in October, Copenhagen’s Mayor Frank Jensen commented: “Air pollution is a global problem, but it has a local solution. Copenhagen wants to be the world’s first climate-neutral capital by 2025. This year, we have put 400 electric buses on the streets and by next year ferries should go electric, too. We want that our citizens can take a deep breath at any time of the year without fearing for their health.”

Many Cities in Developing Countries are Leaders in Renewable Expansion

"We can say that many benefits from renewables are the same all over the world,” explains Adib. “But there are also differences. For cities in the developing world, renewable energy is the only way to expand energy access to all inhabitants, particularly those living in urban slums and informal settlements and in suburban and peri-urban areas.”

Cape Town has the highest electrification rate in South Africa but thousands of households are in areas which are un-electrifiable because the land is illegally occupied or situated in a flood prone or restricted area. Poverty often causes households to not use electricity for part of the month. “While efforts to deliver housing are ongoing there is significant informality. Open flame technologies like candles and paraffin stoves are used. Devastating shack fires occur periodically causing deaths, injuries and displacement. Solar home systems are a safe and affordable alternative,” explains Dan Plato, Mayor of Cape Town.

Executive Director of the United Nations Environment Programme, Inger Andersen, believes that “by avoiding resource depletion and pollution, and creating jobs, renewable energy is a common-sense engine of social and economic development. As our cities expand, those built on a strong renewable energy base will thrive.”

Renewables make Cities Resilient

Data in the report reveals that increased prosperity and living standards in cities cause a sheer insatiable hunger for energy. REN21’s report shows that 70% of all cities are already affected by the impact of climate change today. Says Adib: “If cities don't do something about the way they produce and use energy, they are going to wreak their own destruction. It's that simple and they know it. And with more than one billion people worldwide living in urban slums and informal settlements, the poorest will be the hardest hit. Even in Europe, tropical storms will become more frequent. We got a taste of it when storm Leslie hit northern and central Portugal with wind speeds of over 100 km/h and brought heavy rainfall in Spain and France last year.”

Keeping the energy infrastructure working, once the flood or storm arrives, is essential to secure continued operation of rescue services, hospitals and information systems. Businesses and industry invest in renewable energy to avoid disruptions. Cities adopt energy systems based on distributed renewable generation because they are more flexible and resilient to those central shocks which are becoming more frequent with climate change, underlines the report.

Participation at the Local Level Makes the Difference

"An advantage of renewable energy is that it gives citizens a role in shaping the infrastructure,” says Adib. "Our report shows that in recent years, the number of community energy projects using renewable sources has surged, confirming that democracy is just as important as a driver for the energy transition as climate change.”

Denmark, Germany and the UK are at the forefront of this development. Yet, such projects begin to emerge also in other parts of the world including Thailand, Japan, and Canada, the report notes.

"Cities can actively drive the fight against climate change at national and global level. They are able to tap into opportunities that other levels of government do not have, including a more direct relationship with local citizens and businesses,” notes Germany’s Minister for Environment, Nature Conservation and Nuclear Safety, Svenja Schulze. “Citizen engagement and public pressure have raised cities’ level of ambition on renewables in many places around the world, reaping economic, social and environmental benefits.”

"Yet, it is important to emphasise that even the world’s largest cities with the most decision-making structure cannot replace national governments and their responsibility in fulfilling their commitments under the Paris Agreement. As the climate crisis unfolds, no one can hide,” Adib concludes.

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New IP CCTV system ‘Streets Ahead’ for aluminium manufacturer

Stanley Security has completed a major CCTV installation for Bridgnorth Aluminium Limited, the UK’s only manufacturer of aluminium flat rolled products.

At 27 hectares, Bridgnorth Aluminium’s site in Bridgnorth, Shropshire is extensive. It is home to a casthouse, rolling mill, two litho centres, a multi-slitting line and finishing lines. The company had previously been using three separate CCTV systems, each covering different parts of this large site, one of which was over 15 years old, had very poor image quality and was starting to show signs of failure. Furthermore, none of the CCTV systems had any level of redundancy, so if one failed access to those particular cameras were lost, along with any recorded footage. Steve Denton, IT Manager at Bridgnorth Aluminium, explains the decision to upgrade: “We needed to consolidate everything into one single CCTV system, including all of the cameras from the other three systems, and we needed to add a level of redundancy. The CCTV system is critical to our business in terms of health and safety of our employees and site security.”

Following detailed discussions with Bridgnorth Aluminium a new site wide IP based CCTV system was designed, covering external areas and the perimeter of the site, along with internal areas including key indoor production spaces. The system takes advantage of Bridgnorth Aluminium’s existing IP network which is deployed in most areas of the site, negating the need to install COAX cable. Opting for an IP based CCTV system has also enabled Bridgnorth Aluminium to make use of newer technology with better quality images, which was key.

The new IP CCTV system features Stanley 2MP bullet cameras and dome cameras, including 360 dome models. The cameras feed back to two Milestone Husky™ M500 Advanced Network Video Recording hardware platforms; one of which is used in case of redundancy.

Bridgnorth Aluminium is pleased with the new CCTV system as Steve Denton comments: “The image quality of the new system is streets ahead of the old system. The area of coverage is also far greater thanks to the addition of 180-degree wide angle and 360-degree cameras. The software is very easy to use and has some very useful features to aid with playback of recorded footage. The software has already helped us to retrieve footage that we would have had little chance of retrieving before.”

Stanley Security has been working with Bridgnorth Aluminium since 2017 when it took over the support of the company’s existing CCTV systems. “The transition period had proved successful” states Steve, commenting on their decision to appoint Stanley Security for this project. “The service from Stanley has been excellent, our account manager Amber is one of a kind and always goes above and beyond for us to ensure that we receive the best service possible.”

For more information on Stanley Security, please go to www.stanleysecurity.co.uk
Bolton student fire – the Fire Protection Association calls for a total ban on the use of combustible materials on buildings, irrespective of their height

The recent ban on combustible building materials by the government was for buildings over 18 metres – or six storeys high. The Cube student block in Bolton (providing student accommodation in a six storey block) which caught fire on Friday provides a stark reminder that the problem facing UK fire safety is the result of many issues and not just Grenfell style ACM cladding.

Although the final details have not yet been released, there are a number of key issues reported, all of which are relevant to the ongoing discussions around the current Building Regulations review:

1. This was a modern building, designed and built using all of the latest rules, guides and expertise available. Yet, with two people injured; this must be classed as a near miss event. The high pressure laminate (HPL) and timber cladding components clearly played a large part in the fire’s progress, possibly in association with the insulation and cavity membranes present. Since Grenfell, HPL has been talked about to some degree, but no doubt thorough investigations and consideration have been hampered by it not being the focus of a major incident – until now.

2. This was a risk in a building only six storeys high, where students sleep. Clearly, we should not limit regulations to the mere height of a building.

3. Fire alarms are reported as being almost a daily event, so it is understandable that students did not assume Friday’s to be any different. Despite this, we know high integrity alarm systems exist which are tested for immunity for common ‘false challenges’. Despite countless calls for change over many years, they remain not legislated for.

Jonathan O’Neill, managing director of the Fire Protection Association, commented:

“The fires at the Bolton student block, Worcester Park in London and the Beechmere care village in Cheshire, prove we cannot be housing people in buildings made from combustible materials. This issue needs to be addressed urgently; it simply cannot wait. We urge this issue to be a priority for the new government.”

Fire legislation in the UK has always been slow to develop. It is reactive, and often requires a major incident or a prolonged statistical demonstration of emerging issues, during which time much harm may be done. It is interesting to note now after years of lax regulation and the increasing use of combustible materials in the structure, insulation, and cladding of buildings, how quickly evidence of fault is currently being uncovered.

It demands a similarly speedy response, faster perhaps than has happened since Grenfell.

Manchester’s fire community has been one of the most proactive in assessing and managing their multi storey buildings since Grenfell, and are to be credited for their response and actions which led to an amendment requiring a full evacuation policy.

We must ask again what fire and building regulations have got to do with height. More than two years on from Grenfell, we are still putting vulnerable people at risk. Should this incident alone not demand the selection of non-combustible materials, deployment of a believable detection and alarm system and the installation of sprinklers to ensure the safety of those away from home in education? This scenario is no different to a school, care home or hospital. Risk is a combination of many factors, of which height is only one.

The Fire Protection Association, the UK’s national fire safety organisation, is calling for:
• supporting the combustibility ban for buildings based upon risk rather than height alone
• the mandation of high integrity alarm systems as a means to solving the false and unwanted alarms issue
• a requirement for two means of escape from high rise buildings
• for stay put policies to be used only after thorough intrusive inspection to the building to ensure it is capable of supporting it
• the mandation of sprinklers in high risk environments such as schools and care homes
Protecting the Planet doesn’t need to cost the Earth

By Nick Winstone, MD of InnuScience UK

Perception in the cleaning industry is that to enhance product quality, and specifically, to ensure the greenest products possible, product costs will need to increase. This is a major challenge against an industry backdrop that is dominated by diminishing budgets and the need to reduce costs.

InnuScience – as a pioneering and established manufacturer of biotechnological cleaning products - understands this balance and prides itself on being able to demonstrate real life performance improvement and exceeding industry standards, whilst actually reducing the end-user’s chemical product spend.

There is a lot of hype and ‘green washing’ in the industry, in terms of what constitutes a ‘green’ or sustainable product – most of which is completely misleading. Quite simply, it comes down to what impact the product has on its people and the planet, and our stringent biodegradability benchmark, and strict Enviro Performance Standards underpin the green strength of our products, along with third party certifications from EU Ecolabel and N American Ecologo.

InnuScience, has placed a great emphasis on developing environmentally-friendly products and is committed to being an industry leader in the field of sustainable plastics. For years it has paved the way in plastic reduction, with its industry leading dilutions of 1:150 to 1:300 for most products, meaning one litre of InnuScience concentrate can make 150 to 300 litres of in use product.

We have a mission to shape the cleaning industry, one of these ways is through the use of recyclable plastics and particularly Post-Consumer Recycled Plastic (PCR). Already all our plastic bottles are made of sustainable plastic and we insist on all of our products possessing ultimate biodegradability of 99.99 per cent – according to OECD test 301 - being standard. Furthermore, all our products are either Ecologo or Ecolabel certified.

Our ‘family’ of sustainable packaging now comprises:

- Recycled HDPE Material: Recycled High-density polyethylene (HDPE) or polyethylene high-density (PEHD) is a thermoplastic polymer produced from the monomer ethylene, which InnuScience has discovered is a great material for the manufacture of its reusable trigger bottles.

- Bio Based Material: The material used for the bottles (Braskem Green PE) is Bio Based (Plant-based from sugar cane) and the Ethanol is obtained from sugar cane and polymerized to polyethylene. This polyethylene is then identical to fossil polyethylene. It has a negative CO2 footprint and is 100 per cent recyclable.

- PCR Material: Post-consumer recycled (PCR) resin is the recycled product of waste created by consumers before the plastic waste is turned into resin. This material is strong and able to support the structure and weight of InnuScience’s 750ml trigger, one litre descaler and two-and-a-half and five litre concentrated products.

InnuScience sees this as the start of the sustainable packaging journey and is currently exploring a number of Zero waste packaging options.

We are proud to be leading the way in sustainable packaging by having all of our packaging now in either recycled or bio-plastics. It’s easy to have one or two lines but to have moved everything across has been a real challenge that our team has risen to, resulting in us now leading the way in terms of sustainable products in and out of the bottle.

We believe the future of sustainability is in showing a total commitment to recycling and being environmentally friendly. Currently we have pilot projects to look at how we can optimize closed loop recycling, as well as getting used bottles back to us for rebottling.

Technology has the ability to transform the way we clean and the way we control the budgets around cleaning product spend. By monitoring our customer spend on cleaning products we can ensure that savings are being delivered and that product usage is optimal per customer site.

InnuScience is the youngest and latest-growing of the top 15 manufacturers in the UK, supplying biotechnology-based cleaning products to the Facilities Management, Building Hospitality and Care Sectors.

The InnuScience UK range of professional cleaning products cover the needs of the most prestigious public sectors, education, restaurants, hotels, stations, airports, healthcare and retail contracts, and include cleaners and degreasers, maintenance products, industrial cleaners, odour eliminators, laundry products and floor care.

InnuScience.com
Simple Steps To Sustainable Energy Savings

By Gary Bradburne, Application Specialist, Diversey, UK & Ireland

Reducing energy consumption is often a key objective when improving the sustainability of cleaning operations. Using less energy saves money but also protects valuable resources and reduces CO2 emissions associated with burning fossil fuels in power stations or heating water on-site. There are some simple but effective ways to reduce energy consumption.

Choose the right product for the specific task. This reduces the need for repeat cleaning which avoids additional water heating and electrical equipment running costs let alone savings in time and product consumption.

Switch to cleaning products that work at lower temperatures. Alternative low temperature formulations are available for key tasks such as general cleaning, floorcare, dishwashing and laundry (including disinfection) and will deliver payback from day one. Many can be swapped in to existing processes with minimal need for retraining or significant change.

Switching to a lower temperature laundry product, for example, can save around 35% on water heating costs, consume 34% less water and cut wash time by almost 20%—all excellent sustainability gains.

Maintain existing equipment properly. Inefficiencies waste energy so routine and scheduled maintenance should always be completed at the correct time. Equipment used in hard water areas can be prone to lime-scale. This can accumulate and restrict the passage of water and impact on the equipment’s reliability. It also limits the efficiency of the heating element which means more energy will be required to heat the same amount of water. Regular descaling with a specialist product or switching to formulations that prevent lime-scale will help prevent this issue.

Consider completely different processes: used with water alone for general surface cleaning, microfiber offers a double win because no chemicals are used which means there is no need to heat a solution to a recommended working temperature; ultra-concentrates promote consistency to reduce repeat cleaning while smaller pack sizes reduce transport-related costs and CO2 emissions.

Adopt modern cleaning machines. These are generally far more energy-efficient than the models they replace. For example, recent changes to EU regulations covering vacuum cleaners led to innovative models that are quieter and consume around half the energy yet have the suction and performance of machines rated at over 1000W.

These quickly deliver savings on running costs.

Reputable suppliers can advise on the most energy-efficient combination of their products for specific applications. They will support their claims with proper documentation and may have tools and calculators to help assess savings.
Winning the building energy efficiency race

According to the World Business Council for Sustainable Development, buildings consume more than one-third of total end-use energy and cause a fifth of total greenhouse gas emissions. Consequently, market demand is driving energy-efficient construction projects. At the same time, building price premiums, regulations and government incentives are spurring on energy-efficient and sustainable retrofits of existing properties. The perception of energy-efficient buildings as a business opportunity is growing.

To realise these benefits, building investors and developers need to integrate energy efficiency and emissions reduction in new buildings from the design phase. While building owners that want to make utility cost savings in existing properties must make them more energy efficient and consider the implementation of other sustainability criteria.

Refurbishment can be the more sustainable option when considering long-term environmental impact and the building’s whole life cycle, and it could also allow building owners to attract higher rental rates or retain existing tenants. A sustainable refurbishment process could also significantly reduce ongoing maintenance costs and limit maintenance requirements.
When it comes to office buildings, the UK’s Carbon Trust estimates that around 75 per cent of an industrial unit’s heat is lost through the building fabric. According to a report from the Building Efficiency Initiative (Driving Transformation to Energy Efficient Buildings), each £1 spent on energy efficiency avoids more than £2, on average, in energy supply investments. Such buildings also have other impacts, such as increased employee productivity and wellbeing. Indeed, the UK Green Building Council reports that office workers in high performing, green-certified buildings have a 61 per cent better cognitive function.

While government policies largely fall behind market factors in promoting energy efficiency, there are still regulatory concerns to consider in some markets. Owners of existing properties may also wish to achieve voluntary certification of energy-efficient buildings due to the rental and sale premiums now associated with such properties.

Sustainable building certifications, such as LEED and Energy Star, have been shown to result in a sale price premium of over 30 per cent and a rental premium of six per cent for existing commercial properties. In the UK, a study from the Building Services Research and Information Association (BSRIA) found that over 40 per cent of construction industry respondents recognised “return on investment” and “operational savings” as benefits of implementing BREEAM, which has been identified by the British Research Establishment as the world’s leading sustainability assessment method for master planning projects, infrastructure and buildings.

In the case of new buildings, reducing energy requirements and operating costs is an increasingly complex task requiring a holistic design approach. This calls for not just engineering skills but a broader understanding of building design, and it is important to understand the costs and benefits of implementing energy efficiency features in any project. The cost savings of a project can vary, depending on climate and location, but the adoption of newer building energy codes is proven to yield significant long-term benefits.

The market for sustainable retrofit and renovation projects is also growing, but there is no ‘one size fits all’ approach as the energy usage of each unique building structure, alongside its systems and components, must be assessed on an individual building basis.
taking a multi-disciplinary approach

Energy efficiency covers a wide spectrum of expertise, addressing all aspects of a building. This includes its passive design features, efficient systems and low/zero carbon technologies (LZCT). All of these elements must combine to provide an all-inclusive and complementary solution to realise reduced utility costs. As the requirements will be different for commercial, industrial and residential real estate, a high degree of technical know-how is required for both new construction and retrofitting projects.

New construction calls for expert insight into the building design, the materials used, the technical building services, equipment and components throughout the entire building lifecycle. Existing buildings also require a similar approach towards building structure and infrastructure in order to reduce the building’s specific energy consumption (SEC), including an energy audit of the current systems.

Investments in energy efficiency can be optimised through a solution that combines multiple engineering and design disciplines, such as architecture and a sustainable approach to mechanical, electrical and public health (MEP) design.

One approach to consider is the implementation of an energy management system (EMS) in line with the ISO 50001 standard, which supports organisations in all sectors to use energy more efficiently. Also, to help identify areas for improvement, 3D computer modelling, and dynamic simulation modelling can be used to conduct energy efficiency and simulation studies, delivering an accurate and reliable representation of a building’s energy consumption.

For new buildings, all of this data can be used to develop realistic energy plans, incorporating variations such as different energy prices in model calculations and also take into account funding options, operating expenses and other costs. A tailored approach to sustainability should begin at the concept design phase, as planning for carbon reduction and energy efficiency at this early stage of the building lifecycle will help to reduce costs and the complexity of the final product. A screening analysis approach could also be used to help save time by eliminating options that are not suitable for the project.

To revitalise existing buildings, an energy efficiency consulting approach should focus on analysis, measurement and interpretation of all aspects of the project. An energy audit could be used to assess the status quo of the building, covering process analysis, electro-technical system and consumers, heating systems, ventilation and air conditioning, as well as the condition of the building itself. The energy supply infrastructure and the energy demand of the main consumers within the building should also be measured, taking into account factors such as heat transmission, air distribution and potential re-use of waste heat during actual production processes.

Based on the findings in such an audit, energy-saving measures can be identified, including the savings potential for each proposed measure, as well as the costs and payback period of any required investment. To aid the decision-making process, the suggested energy efficiency measures should be divided up according to whether they require ‘no capital investment’, ‘minor capital investment’ or ‘major outlay’. The catalogue of measures should also be supported by feasibility studies that take annual operating and total costs into account, helping to achieve carbon and energy reduction in a cost-efficient manner.

By integrating passive and active design elements for lighting, HVAC and other building processes, requirements for engineering services can be reduced by as much as 25 per cent, as well as reducing energy consumption and optimising efficiency in building operation. Taking a more holistic energy efficiency solution such as this enables buildings to be future-proofed against rising utility costs and any new energy performance legislation. Building owners can also meet corporate social responsibility obligations and demonstrate building efficiency through sustainability scoring systems such as BREELAM.

Several factors are driving demand for energy efficient and reduced emissions buildings, including market pressure, client expectations, operating cost reduction, social/corporate responsibilities and legislative requirements. While the correct implementation of energy efficiency measures requires a strong degree of technical know-how, the results deliver great business benefits, including utility savings through improved energy efficiency, added value to real estate assets, and the achievements of corporate social responsibility requirements for emissions reduction/carbon neutrality.
As universities become increasingly mindful of their environmental impact, today’s facilities managers are no longer being tasked with simply seeking energy savings when it comes to lighting, but also implementing LED technology that can deliver wider value to the establishments they manage. Richard Hunt, managing director of Contrac Lighting, explains.

Lighting accounts for up to 20% of energy costs in Further and Higher Education (FHE) establishments, so it should perhaps come as little surprise that post-18 educational institutions have traditionally been keen to adopt LED lighting technologies that help reduce costs and save energy. However, as the challenges of illuminating campuses become broader – driven by corporate social responsibility (CSR) initiatives and green energy standards – so too are the requirements for lighting.

Harnessing the power of state-of-the-art LED lighting technology, therefore, has also become about enhancing sustainability, reducing carbon emissions and building green credentials, as well as ensuring adequate lighting is supplied to all areas of a campus. All of this is leading to a changing role for the modern university estate manager.

Facilities teams now have a greater number of responsibilities as they seek to foster and enhance the teaching, research and clinical activities of the campus, and central to this is lighting. However, given that FM’s are tasked with managing wide-ranging facilities, from classrooms to libraries, sports halls, lecture theatres and even science labs, each with their own precise requirements when it comes to illumination, the challenges of lighting a large campus estate, not only in terms of high energy costs, but also ensuring adequate lighting is supplied, are vast.

The campus challenge

Whilst understandably the biggest draw for educational establishments that switch to LED will likely be the substantial savings in energy that can be achieved, such a search for cost reductions can pose its own problems. For instance, the pursuit of savings can be at a detriment to light quality and suitability to the environment in which they are installed, meaning universities are left frustrated by lighting systems that on paper look good, but in reality, are not fit for purpose and can even have a negative effect on building occupants and finances.

What’s more, by opting for cheaper, lower-quality LED luminaires, high light levels are often achieved at the cost of
The result is unbalanced illumination and imprecise colour output. Furthermore, by installing cheaper off-the-shelf lights, solutions often have a shorter lifespan leading to larger maintenance costs – placing FMs under unnecessary pressure.

The good news is, today’s facilities have a new wave of LED lighting technology at their disposal, designed to provide superior lighting quality compared to heritage lighting sources, while at the same time delivering significant improvements in cost and energy efficiencies. However choosing the most suitable, well considered options and specifications depends on the exact environment.

Looking for products with high quality, long life, low energy consumption and minimal maintenance should always remain central to any LED upgrade, however, facilities managers should also consider a number of less well-known factors when looking to implement the latest technology.

**Considering lighting quality**

The latest LED technology, for example, can deliver significant improvements in lighting quality across all areas of the campus, largely due to the quality and stability of Correlated Colour Temperature (CCT), which is why it is becoming an increasingly relevant factor in deciding between luminaires.

CCT is a metric used to characterise the colour appearance of white light, specifically how ‘warm’ or ‘cool’ a light source appears. Measured on a scale of degrees Kelvin (K), a light source that emits cool-blue temperatures of over 4000K is considered cool, whereas a luminaire with a CCT of 2700K to 3000K would be considered warm in appearance.

By calibrating lights at varying frequencies, spectral powers, and adjusting CCT and intensities, lighting can be tailored to suit different tasks being completed, times of the day or even the environment in which the lighting is installed. This ensures the ideal lighting scenario for any building is achieved.

Cutting-edge lighting solutions, precisely attuned to specific colour temperatures and Spectral Power Distribution (SPD) can even influence mood. Commonly referred to as Human-Centric Lighting (HCL), or Circadian Lighting, the goal of such fine-tuning is to deliver lighting that supports the natural circadian rhythm of a person, delivering benefits to human physiology and psychology.

By effectively replicating natural light, and increasing illumination as the day begins, lighting can stimulate the production of the “stress hormone” cortisol to rouse wakefulness. Whilst, dimming the levels of illumination and altering colour temperature at the end of the day can encourage the secretion of melatonin, the hormone that helps promote sleep and improve emotional wellbeing.

Warm, soft, dim lighting has been proven to help spur creativity and stimulate the production of the “stress hormone” cortisol to rouse wakefulness. Whilst, researchers at the Cologne University of Applied Sciences even found that university employees exposed to warm lighting were able to solve challenges more creatively.

**An expert partner**

Although the trials of lighting an education environment are well-defined, understanding how to overcome them remains a substantial challenge. And whilst knowledge of both the visual and non-visual benefits of light are growing, especially amongst FMs for educational institutions, realising the value that LED lighting can deliver beyond a positive impact on the bottom line often requires specialist expertise.

This is where the benefits of collaborating with a company that has a wide-reaching set of capabilities, which include manufacturing, as well as design and consultancy services, can come to the fore.

By forming such a partnership, educational establishments are not only more likely to have the most appropriate solution installed, but also achieve the desired outcomes, be that cost savings, reductions in carbon emissions or even aesthetical improvements in facilities, are achieved.
Sensors and relays: the eyes, ears and hands of a building automation system

By Fabrizio Petris, Senior Business Development Manager,
Omron Electronic Components Europe bv

Until now, energy efficiency measures have focused on the construction of the building, looking at for example the insulation and windows. The new Energy Performing Buildings Directive, adopted in 2018 and mandatory from 2020, marks a significant shift, increasing the focus on the control of energy use within buildings: smart buildings and building automation. This should be music to the ears of building managers everywhere. Smart buildings offer an excellent ROI, but it is still difficult to get the initial capital required signed off. The new directive will help, giving the planet reduced carbon emissions and owners reduced costs. In addition, smart building systems can be extended to additional functions such as security and improving the comfort of occupants. New technologies are continually emerging to enhance smart building systems and reduce their cost. This article surveys the state of the art in these technologies starting with sensors that provide the data and moving on to control components that enable the system to act on it.

Image recognition

Using image recognition technology originally created for mobile phones, building automation systems can interpret the image collected by a camera. They can see and respond to gauge their mood, their age and their gender. They can also recognise an individual. Using these sensors, security systems and building automation systems could eventually be integrated together using one set of vision modules. The data they collect can be responded to automatically, saved or collated centrally, and passed to an operator only when necessary.

Potentially an office can recognise an individual when he or she arrives, and set up heating and lighting just the way they like it.

The Omron HVC module (Figure 1) is the first vision module specifically aimed at applications like building automation, available in low volumes and readily integrated by any designer without any need to understand the complex algorithms needed to recognise faces and expressions or the optical design. The module is a fully integrated, plug-in solution. The developer can just look at the outputs and configure the system to make appropriate decisions depending on their status.

Thermal sensors

Where the application calls simply for the detection of people without the need for recognition, thermal sensors are a well-established option – and a great alternative to motion sensors. In a building automation system, such sensors can also be used in many other ways, making a valuable contribution to safety by identifying potential problems before they become major hazards. Many times, for example, start with localized "hot
spots' and a thermal sensor can detect a potential fire before it ignites. This can not only save lives but also costs, allowing preventative maintenance to be undertaken in a timely manner.

It would be useful in a building automation environment, such sensors need a wide field of view, to detect the presence and location of people and other issues in a space accurately and reliably. Omron D61 MLMS thermal sensors are based on an IR sensor which measures the surface temperature of objects without touching them using a thermopile element that absorbs radiated energy from the target object. Omron has just released a wide angle version of the D61 (Figure 2) with 32 x 32 elements. The D61-32L-01A can view across 90.0° by 90.0°, encompassing a wide area such as a whole room from a single point.

Environmental sensors

Human operators of systems monitor their environment the whole time, often in ways that we're not aware of. We respond to the breeze on our face, movements in our peripheral vision, small changes of pressure in our ears and in the soles of our feet. A smart building needs to do the same, responding to changes in its environment to optimise energy efficiency and occupant comfort.

Multi-purpose environmental sensors make it very easy for the designer to deliver a wide range of measurement functions from just one small sensor: This will save development time by providing numerous options that can be tailored to the user's needs. Whether it's a question of simply making sure the office environment is kept at the optimum working temperature or ensuring that say a museum has the correct humidity and lighting to protect the exhibits, these sensors offer easy to interpret data that can then be analysed and used to set parameters and make real-time adjustment.

There are probably seven core parameters that any environmental sensor for building and industrial automation systems should be able to monitor: temperature, humidity, quality of air VOC, light, barometric pressure, noise and acceleration. Sensors like the Omron 2JCIE (Figure 3) provides the capability to monitor all of these, and provides data via popular wireless and wired data interfaces like USB and
Sensors for Smart buildings

Bluetooth. Despite its compact size, 2JCIE features its own embedded memory for data logging to keep track of the surroundings.

**Air quality**

Ventilation and adequate air quality in a building is a major issue, and building regulations in countries including the UK make detailed stipulations about adequate mechanical ventilation rates in spaces including non-habitable rooms, such as toilets, bathrooms/shower rooms, kitchens and utility rooms in domestic dwellings.

Whilst building engineers will ensure that such spaces are designed with fans and other means of ventilation that comply with the regulations, building managers need to maintain those fans and ensure that their performance has not dropped below the required level due to wear or a buildup of dirt in the airway. Suitable sensors are available to help with this task. Omron’s D6F-PH digital pressure sensors (figure 4) for air flow and clogged filter detection in heat recovery units do this by detecting the differential pressure upstream and downstream of the fan or filter, detecting the degradation in performance as it becomes clogged with dirt and providing an alert when cleaning or replacement is required. A more compact alternative is the 25MPB barometric pressure sensor. The Omron D-6FV can improve efficiency by monitoring the exact air rate at which air is extracted by the fans.

**Controlling the outputs**

If these sensors are the ‘eyes and ears’ of a building automation system, it also needs ‘hands’ to act in response. It needs control over outputs: heaters, lights, fans and other elements. Relays are still a great solution. Open the case of almost all building automation systems and you’ll find...
electromechanical PCB relays used at the output. With so many alternative switching technologies available, including solid state switches, this may come as a surprise. There are four important reasons behind this:

- Relays have one or more relay contact outputs
- Contacts can be supplied with a changeover output which is used for interlock or scanning circuits
- Relays can individually switch AC or DC voltages
- Relays simultaneously meet insulation and glow wire test requirements

Because loads vary enormously and the latest technologies place new demands on relays, manufacturers like Omron have developed plattform relay series that address all of the different requirements. For example, its G9Q family offers different specifications with the same PCB connection to meet different switching needs.

In common with other classes of components, relay manufacturers are being challenged to make their components more compact. Designs that are almost 30 mm long used to be perfectly acceptable – not any more. The G9Q, for example, is a high specification industrial relay but is only 20 mm long by 15 mm high by 10.3 mm deep.

Specific applications have their own challenges. For example, LED lighting, water pumps and capacitive input meters with Power Factor Correction produce high inrush currents. This puts extreme loads on relay contacts. If relay contacts weld together this destroys the relay and thus the device. Type G9Q-1A-EL2 (Figure 5) was developed for capacitive inrush currents in the ms range. Such relays can switch inrush currents of 40 A/500 µs and nominal cut-off currents of 1 A/250 V AC up to 100,000 times.

The same design is available for inductive motor loads (e.g. trans) which have inrush currents in the ms range. The G9Q-1A-EL3 is designed accordingly and can perform approximately 300,000 operations with 250 V AC/30 A 500 ms inrush currents (inductive load) with a 3A cut-off current.

The G9Q-1A-EL can handle such switching tasks and others like service life (100,000 operations) for general standard applications (resistive load) with high contact loads (10 A/250 V AC) where relays are often subjected to high temperature rises.

To save power latching, designs are also available, such as Omron’s G9RL-U (Figure 6), G5RL-K and the G5RL-HR that can switch up to 16A and are capable of dealing with high inrush currents of up to 150A.

**Conclusion**

As awareness of the impact of wasted energy in buildings is increased, the technologies on offer to conserve this energy and control its use has improved dramatically. The sensors and relays described above put building managers in an excellent position to reduce both costs and carbon footprint. With the development of the cloud, they no longer even need to be present in a building to receive a full picture of what is going on. All of the data collected and the actions taken by the system in response can be stored on the cloud, and reviewed by the building manager. He or she can reprogram the system to improve its response in the light of experience, or even intervene directly if needed. Truly ‘dumb’ buildings are becoming a thing of the past.
Codelocks find the perfect match for Loyd Lindsay Rooms

Set in leafy Oxfordshire, the Loyd Lindsay Rooms is a unique and flexible venue, offering event facilities. From board meetings to conferences, birthdays to weddings, the staff pride themselves by offering the highest level of personal service from start to finish.

Loyd Lindsay Rooms were looking for an access control system which would be secure, easy to use and flexible for their needs. Codelocks provided the solution with the CL5510 smart lock, which can be operated and managed by code, card and phone, offering easy access and control.

Feeling heartbroken
Before discovering Codelocks, Loyd Lindsay clients had to be let into the venue. This meant that the caretaker was constantly going back and forth to the venue to let individual groups in to the rooms or to open the whole site for a function. This prompted Loyd Lindsay to look for a flexible, reliable and professional solution to their access needs.

Love at first sight
Following a presentation from local locksmiths JPriest & Son at a BMI marketing referral group, Loyd Lindsay rooms decided on a Codelocks CL5510 smart lock.

Jason Priest, owner of JPriest & Son has been working with Codelocks throughout the duration of his 30-year career, partnering with Codelocks on many projects including schools and colleges within Oxford University. Speaking of Codelocks he stated, “They are a very professional company and the development of its standalone smart lock, prevents the need
for continuous code changes on site.

“The CL5510 is a quality product, reliable and versatile. With its ease of installation, we did not hesitate to recommend this smart lock over others in the market place. It offered everything the Loyd Lindsay rooms required, it’s simple to use and offers the phone, code and card options as well as a key override option. All other manufacturers could only offer some of the features, or could offer all but only in conjunction with other smart products.”

Karen Smith, Manager of Loyd Lindsay rooms knew that Codelocks would be the perfect solution to their needs, “I didn’t look at any alternatives as having spoken to Jason following the presentation, he assured me that Codelocks CL5510 could do everything I wanted it to. I spoke to Jason straight after the presentation who procured the lock for me.”

The icing on the cake

As access control was The Loyd Lindsay Rooms main concern, JPriest & Son fitted a CL5510 smart lock on the front door. This lock allows codes to be created via an online portal and issued to customers via email or SMS, thus eliminating the need for a staff member to be onsite.

About CL5510

With the CL5510, controlling access has never been so convenient, especially since all aspects of the lock can be managed remotely using a smartphone. Users can choose the most suitable entry method for their needs, whether that be allowing access via a simple code or by the use of compatible smart cards. The lock audit trail data can be downloaded and viewed, to keep track of when and where the lock was accessed. Codes can be set for a specific start date and time, automatically expiring after a set duration. In addition, ‘code free’ periods can be set to allow free access at certain times of the day.

“The Codelocks system has allowed me to set up specific codes for individual clients to give them access to the venue without our Caretaker being present. It has also enabled me to give a one-off access code to a Contractor when I was held up in traffic. He was able to start work at the venue without having to wait around for me.”

- Karen Smith, manager of The Loyd Linsday Rooms.

The knight in shining armour

The major benefit to the Loyd Lindsay Rooms to date has been a financial one. Remote access means that the venue no longer has to pay their caretaker to go to the venue to open up and lock up after every client. The lock has also provided additional security. Previously if a client was using the venue, the front door was open which lead to people often wandering in to look around or use the facilities. With the Codelock’s system, this is no longer possible.

“Our Caretaker is very pleased with not having to continuously visit the venue to open and lock up,” said Karen. “The venue is now unlocked at the beginning of the day and then locked up at the end of the day – with the Codelock system being used throughout the day.

“The feedback from our clients has also been positive as they now know that they will not be interrupted by people just walking into the venue.”
The workplace has evolved beyond recognition for many people in recent years, with one of the most significant changes being that more and more people are now offered the option of working remotely. This incentive is a result of a combination of changing attitudes, enhanced technology and software solutions. All of which have been transforming the way that businesses of all shapes and sizes are run and how customers interact with them, as well as allowing employees to work outside of the office.

The TUC estimated that the number of UK people working from home has increased by a fifth in the 10 years to 2016, and with everything becoming increasingly digitised and technology enhancing at such a rapid rate, we can safely assume that this trend will only continue to grow. In fact, it is expected that 50% of the UK workforce to work remotely by 2020.

For many businesses, the biggest apprehension around making the movement towards remote working is making sure staff remain streamlined and connected with colleagues and managers at all times, but one concern which is not being properly addressed is data security considerations.

While this incentive has been well received by employees, and it certainly makes a difference to that healthy work-life balance we are all searching for, it is vital to make your team members aware of the extra security risks that they face when working from home, on the train or at a local coffee shop.

In this article, The Access Group shares actionable advice on certain risks that should be considered and steps that employers should be taking to ensure that they are educating employees on protecting company data from security threats.

Consider transfer risks

The way in which data can be moved around transferred is taken for granted by most people nowadays, as electronic communications are available on the go 24/7. When working remotely, it is likely that you will still be working with the same sensitive company information and customer data as you would be if you were on site - but without the digital privacy you are used to.

Transferring data can take many forms, whether it be over...
email via your domestic internet connection, through your mobile phone network, or on a physical medium such as a USB stick. Each of these methods have inherent risks that should be addressed:

- Domestic internet, even with WPA2-PSK security, is vulnerable to various forms of hacking and malicious access.
- Mobile phone networks can be even more open to attack as information can be accessed without leaving a trail.
- Physical media can be lost or stolen (and could end up in the wrong hands).

Employers and remote workers should be working together to tackle this issue and potential cyber security threats; from enforcing security and implementing a remote working policy, to educating the importance of commitment to security best practices. Simple actions such as using a USB sata blocker, encrypting sensitive data within emails and avoiding public Wi-Fi will make a huge difference.

**Utilise the cloud to minimise risks**

If your business take advantage of cloud hosting, then you are already one step ahead in avoiding potential security breaches. The ease of use that “anytime/anywhere” password protected cloud access offers means that whatever device or platform your employees prefer, they can still connect with your work systems remotely.

The concept that digital information can be accessed instantly around the world actually becomes part of a security solution, rather than posing risks, meaning the cloud takes the flexibility of working from home to a totally new level.

In addition to being able to access files and documents and log into relevant systems safely, remote workers should also be encouraged to back up data frequently so that a lost device doesn't mean lost data, and cloud storage solutions are a great solution for this. By migrating to the cloud, you can also ensure that applications are patched and updated regularly to maximise protection.

Whilst ensuring your remote workforce is protected and safe from security breaches is vital, your security policy shouldn't add to employee's workload; they should be simple and efficient. It is one of the most important investments you should make as the safety and security of your data and systems has to be a priority, and although it will take a bit of work, you will reap the benefits including reduced office costs, higher morale and increased staff retention as well as access to a wider talent pool.
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- www.1stwaste.co.uk

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