

Dear Mr Nelson

As we enter a new phase of tiered lockdowns across the country the COVID-19 pandemic continues to cast a long shadow and cause havoc across all sectors of British industry. Risks to the continued viability of all businesses have increased since the ending of the furlough scheme and the introduction of these lockdowns at a time when sharp rises in new cases are being recorded all across the country. We are all acutely aware the government is trying to balance its concerns for public health and wellbeing in the one hand with its genuine desire to keep businesses open and stave off more economic devastation in the other. Most will agree we must do everything we can to keep businesses open safely but there are many who feel new lockdowns are taking a step backwards that will have a far more damaging effect than the first time around yet the evidence indicates that forced segregation/physical distancing is so far the only way to get on top of transmission and reduce the R rate. At a time like this one would think the government would examine every possible way out of this conundrum but this is evidently not the case. After many letters and emails to government ministers and visits to Westminster offering our tried and tested solution and since Boris has abandoned his "Go Back To Work" plea there is clearly no interest or desire to investigate despite the government handing out huge contracts for other things. Such inaction is perplexing and makes a reasonable person question what is going on ?

Throughout the pandemic the government has always said it is led by the advice of experts. This story shines some light on the validity of some of that advice and describes our solution that can help get control of the R rate and deliver significant economic benefits to British industry. Reflective Electro Magnetic Energy or REME is that solution. A robust and proven advanced air purification technology that has been in production for over 15 years developed by RGF Environmental Inc of the US that mimics Earth's natural air cleaning processes indoors. RGF

is a world renowned 35 year old innovator across the air and water purification and food sanitisation industries who earlier this year was declared a “critical manufacturer” by the US Dept of Homeland Security as part of its national response to the COVID pandemic. RGF has installed millions of its products in over 60 countries around the world and demand has skyrocketed since the pandemic hit and set to rise further following successful testing against the actual SARS-CoV-2 coronavirus that causes COVID-19. REME adds a unique extra layer of protection beyond government measures in work, home and travel settings without any of the economic or social disruption of lockdown and allows people to confidently go about their daily lives without fear. It actively treats and disinfects every cubic mm of indoor air and surface space simultaneously and continuously. It deactivates and destroys viruses and bacteria the moment they are exposed anywhere in the indoor space, whether breathed, spoken, sung, coughed, sneezed or whether touched onto surfaces. It provides continuous COVID-19 protection. It is not dependent on the behaviours or actions of people. It is a superior and proven technology that reaches the parts of indoor spaces no other air purification technology can reach. Tried and tested and simple to install or retrofit it is rebuilding public confidence and helping get businesses back on their feet and people back in to work in the UK and all around the world. Recent UK installations include domestic homes, commercial offices, dental offices, bars & restaurants, children’s play centres, hotels and a world famous City of London building to name but a few. Our technology was even mentioned by the local MP of a client described as a COVID “Bounce Back business”. It is the solution to the COVID-19 conundrum for indoor spaces.

The safety credentials of REME are peerless. However there are two important benefits that arguably outweigh them and are perhaps more pertinent. The first relates to the new CIBSE ventilation guidelines which, if and when implemented will cause vast increases in energy and utility maintenance costs for British business combined with massive reductions in energy efficiency. CIBSE guidance states "The

potential benefit to public health at this time outweighs the reduction in energy efficiency caused by not recirculating air.” so whilst all UK businesses have achieved major carbon reductions since the 2008 UK Climate Change Act, adhering to this guidance will destroy much of that good work and drastically impact corporate bottom line performance. This dire and backward looking outcome can realistically be avoided if REME is used. The second relates to recurrent fogging disinfection processes and the massive cost savings that can be achieved with REME, which is a one off permanent deployment that works continuously, is entirely safe and allows the workforce to stay working without any of the disruption or productivity losses that are routinely associated with fogging. This is best illustrated by a recent study in a City of London building where the cost of REME for the entire building paid for itself within 6 months compared to recurrent monthly fogging.

It is truly shocking the COVID-19 mitigation guidance relating to ventilation air change rates and air cleaners is so poorly researched and even more shocking the refusal by the authorities to consider all the available options. To be sure increased ventilation air change rates combined with the recommended use of "most suitable" passive HEPA filtration or UVC systems for poorly ventilated areas is definitely not the most best or most effective way to reduce transmission. On top of reduced energy efficiency, increased utility and maintenance costs and increased occupant comfort issues that go hand in hand with increased ventilation rates, businesses must recognise it is just a dilution/displacement process that does not kill viruses. It merely moves them around and it has absolutely no effect on surface contaminations and therefore the risk of transmission remains considerable. Further the performance of passive filtration and UVC technologies is highly conditional with numerous well known practical drawbacks. Filters do not capture all passing particles, clog up quickly and allow live particles to fall back into the passing airstream, reduce airflows that increase utility costs, reduce component lifespans and require frequent changes that can create a health risk. UVC, which is

erroneously described in the guidance as a technology to "decontaminate air that is recirculated" has no effect on particles in a moving airstream due to the Inverse Square law and exposure time needed to deactivate microbials. In fact UVC is only effective against trapped or static particles in direct line of sight from the UV light source such as those captured on filters or AC fan coils and consequently is only practical as a maintenance item and certainly not as an air decontamination technology as suggested by the guidance. It is unfortunate the guidance did not consider REME which is effective without the need for massive increases in ventilation rates and goes way beyond the capabilities of these passive technologies.

This pandemic is developing into an existential threat for much of UK PLC. At a time when every UK business has genuine concerns about the health and wellbeing of their staff and customers and increasingly grave concerns about the survivability of their businesses REME is a genuine shimmering light at the end of a long dark tunnel. Since the first lockdown most businesses that applied all the mitigation measures required of them now face potential wipe out with these new tiered lockdowns. REME offers a robust and proven defence against this threat without impacting energy efficiency obligations or major ongoing productivity disruption or cost. It shines a light onto the pathway out of this long dark tunnel.