

How intelligent lighting and welfare systems could make your site more efficient

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Colin Aspinall, director of ICT and Business Change at Welfare Hire Nationwide, discusses the benefits of making basic onsite equipment more intelligent.

The humble welfare unit: for anyone who works on or visits rail construction sites regularly, these modular cabins will be a familiar sight. Once installed, they're static and easy to overlook – a no-frills space in which workers can take breaks, prepare food, and use toilet facilities.

At least, that's what you might have come to expect. Certainly, you can up-spec for more spacious and comfortable facilities. But additionally, could the onsite equipment we all take for granted help you run your site more effectively?

The simple answer is 'yes'. Powered by telemetry, a new generation of intelligent lighting and welfare systems is making it easier to manage sites, review and optimise fuel usage, and even report on ESG performance. Below, we'll explain how, thanks to smart tech, these modern assets could make your site smarter and more efficient.

What is intelligent onsite equipment?



In this case, we're talking about equipment fitted with telemetry (data measurement) systems, which provide insights into power and performance. Site managers can review this data, using it to inform decisions about energy use, servicing, and even security.

While not yet the industry norm, many top-of-the-range products now boast this functionality. And it isn't reserved for highly complex equipment; everything from lighting towers to welfare units (including the most advanced systems in Welfare Hire's range) can be fitted with smart tech.

But what kind of challenges could telemetry help you to address onsite?

Managing onsite services efficiently- keeping your workforce happy and productive

Onsite equipment must be managed and maintained. If you're using lighting towers to illuminate a sprawling rail construction site, you'll need to keep track of them as they're moved from area to area – not to mention managing fuel use as required. WC facilities must be serviced regularly, with their water tanks filled and their waste tanks emptied.

Smart tech enables site managers to monitor their equipment remotely, issuing alerts when fuel is running low or tanks need to be emptied. This, in turn, allows them to take a more informed and cost-effective

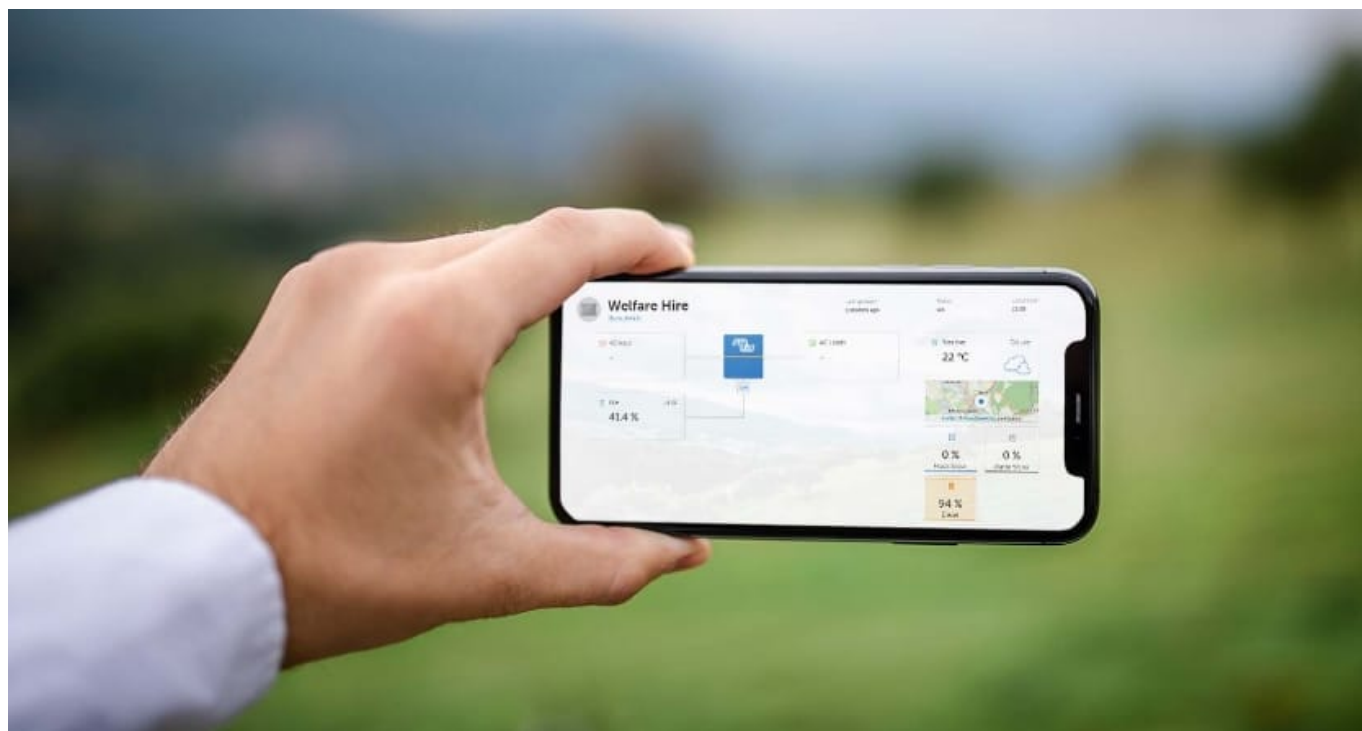
approach, minimising trips to site and booking services only when they're required.

Perhaps your eco-friendly lighting towers use hybrid battery power? Smart tech would allow you to remotely control noisy backup generators, switching them on when they're least likely to disturb lineside residents, as well as optimising silent, green running.

Equipment can even be tracked and protected via geofencing, with alarms for crossing a virtual boundary, and allowing you to locate it quickly and easily.

Indeed, making the simplest equipment more intelligent can lead to considerable time and cost savings onsite, while also keeping your facilities performing optimally to support your employees, keeping them safe and productive onsite.

Managing power usage- reducing costs and saving downtime



It can also support and inform your power management strategy. As discussed, telemetry provides granular insights into energy usage, showing which power source an item of equipment is drawing from, battery charge status, and how much power is consumed.

These insights won't just enable you to manage your onsite services more effectively, anticipating refuelling needs and minimising downtime. They'll also help you to ensure that equipment is operating as efficiently as possible, and to identify and address inefficiencies. With smart tech, there's no guesswork – just accurate data, available in real time.

Monitoring ESG targets- supporting your green credentials

With managers under increasing pressure to meet ESG (environmental, social and governance) and sustainability targets, tracking onsite energy usage is more important than ever. The smarter the equipment, the easier this is; with telemetry, you can generate a comprehensive report on a product's energy usage at the push of a button. And the most ubiquitous onsite equipment – those tower lights and welfare facilities that are essential – is a great place to start.

Intelligent equipment can even help you to manage your carbon footprint, by helping eliminate unnecessary services and site visits, and taking HGVs off the road.

Indeed, when it comes to site management, you could unlock cost, time and carbon savings in unexpected areas. Simply put, it pays to make basic equipment more intelligent and invest in future-proofing your projects.