

## OpenBlue Enterprise Manager

# On the record: How organizations can use digital energy tracking and optimization tools to close in on net zero

As sustainability becomes a global corporate mandate, major organizations are making bold commitments to decarbonize building operations and conserve resources. Altogether, buildings account for 40% of global emissions, which makes them a critical focus area for businesses to reduce their carbon footprint.

But there's a problem. Many organizations don't know where to begin on decarbonizing their operations – let alone have the data transparency needed to set realistic goals. Without this essential insight, it's difficult to make informed decisions and develop an effective sustainability program. Consider a company with multiple buildings at different stages of maturity, in different regions, with different teams managing various aspects of the transition to sustainability. As you can imagine, tracking and reporting progress for this company, or any organization, can be overwhelmingly complicated.

Understanding the distinctions between Scope 1, 2 and 3 emissions, and how to measure each, can also add to the confusion.

- **Scope 1 emissions** are direct emissions from owned sources like buildings or equipment
- **Scope 2 emissions** are indirect emissions from the generation of purchased energy
- **Scope 3 emissions** are all the other indirect emissions, including those from suppliers and other companies up and down the value chain, as well as emissions in products sold to customers

With lawmakers and regulators adding pressure for proof of progress toward net zero goals, building managers will have to find a way to work through the confusion and accurately report performance. Following through with these

commitments requires establishing key performance indicators (KPIs) and a trustworthy system for tracking progress.

According to a recent report from Harvard Business Review, only 27% of companies have any enterprise-wide economic, social and governance (ESG) KPIs in place at all, and only 3% are using a complete system of metrics.

Fortunately, the latest digital energy tracking, management and optimization solutions can better help organizations understand their current level of operational sustainability, set realistic goals for saving energy and avoiding emissions, and track and report on progress for building certification and corporate reporting.

### The challenge of accurately measuring progress toward net zero

Accounting for emissions, understanding greenhouse gas reporting rules and knowing which building upgrades are appropriate can be like learning a new language. In many cases, organizations have different teams with different metrics or ways of addressing the same challenges and objectives. Facility and operations teams look at things in terms of utility costs and resource usage, while sustainability teams talk about emissions and environmental impact.

Organizations need to find standardized metrics and ways to connect the dots, creating a common language across their teams to build better transparency.

Many organizations are taking on this challenge with a manual approach to tracking and reporting. But keeping track of all the various documents manually is a cumbersome and unreliable process. Utility bills come in a variety of formats and each provider might use different methods for recording usage. Many companies

scan these varying bills and then manually transcribe values into spreadsheets for every utility at every facility.

With thousands of records across a wide range of buildings, it can become extremely difficult to cross-reference and verify data. Not only is this incredibly time-consuming, but it also leaves a lot of room for errors. And these errors often perpetuate over time, month by month.

Having unreliable data is a critical shortcoming. Organizations need accurate data to understand where they stand in the journey to sustainable operations. And it's essential to have accurate audit trails when meeting specific benchmarks set by regulators.

They also need data that is up to date. With the time-consuming nature of manual data collection and entry, teams may not have access to the most current data and could be making decisions based on outdated information.

## The power of digital energy tracking and optimization solutions

With a digital energy optimization system for consolidating data, tracking emissions and reporting progress toward sustainability, companies can simplify management of energy and emissions goals for a single facility or their entire enterprise. This digital solution offers a unified system for aggregating data and standardizing calculations, which can help companies establish and track clearer KPIs while also improving the accuracy of their reporting with the most up-to-date information.

By digitally automating data collection and analytics for Scope 1 and 2 emissions, building managers and owners can enhance their reporting for certification and compliance frameworks. Now, instead of working with complicated spreadsheets, they can use a single digital dashboard to assess carbon footprints, set targets and manage their emissions.

Not all digital energy tracking solutions offer the same capabilities and functionality, but the most advanced solutions can automatically extract data from monthly utility bills, on-site renewable energy sources and local emissions factors. They can continuously track and aggregate data from these multiple streams and translate it into a unified language with standardized calculations for Scope 1 and 2 emissions. They can also factor in credits and carbon offsets when calculating total net emissions for each building site.

Digital energy tracking and optimization solutions also make it much more straightforward to understand sustainability baselines and to set goals and KPIs from the corporate level down to individual subtargets, such as specific systems within a building. The most advanced digital energy tracking and optimization solutions can also automate equipment management, optimizing energy usage to meet overall

sustainability targets for a building. Users can set targets based on parameters like emissions, energy or energy-use intensity for a facility, and the system will provide recommendations and improvement measures based on overall building or even portfolio-wide goals. These KPIs and reporting methods are completely configurable, so users can build out tailored dashboards or reports for their specific needs.

## Driving global corporate sustainability with digital energy tracking and optimization

These technologies provide a solid foundation for sustainability initiatives by connecting the performance of real-world assets and facilities across an entire building portfolio to overall corporate objectives.

In addition to accurately measuring progress, digital tools give businesses deeper insights into potential areas of improvement that could accelerate net zero progress within single buildings or across global portfolios. By measuring and comparing KPIs at each facility, such as energy intensity, which measures total tons of CO<sub>2</sub>e (carbon dioxide equivalent) per square foot or square meter, cross-functional teams can improve their transparency and build a more sophisticated, holistic strategy for reaching corporate sustainability goals.

Building management teams interested in employing this technology should be aware that different levels of digital energy tracking and optimization solutions are available. The essential level, as discussed in this article, will provide a kickstart to energy and emissions tracking, including measurement, monitoring and reporting of carbon emissions, energy use and utility spend. A more enhanced solution will offer even more impactful energy and emissions management to help reach carbon reduction goals and facilitate compliance statements. At the highest, most optimized level, the technology provides enhanced plant reliability and sustainability with automated real-time operating decisions. The optimized package is ideal for those looking to dramatically increase efficiency and drive sustainability by minimizing utility cost and greenhouse gas emissions.

These digital solutions are key to establishing science-based targets supported by verifiable data. As accountability to regulators, investors, partner companies and customers becomes increasingly stringent, the power and speed of digital tracking will become invaluable. As accurate carbon footprint assessment, target-setting, reduction management and tracking become an integral part of doing business, digital energy tracking and optimization offers an all-in-one solution that empowers businesses to succeed.

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