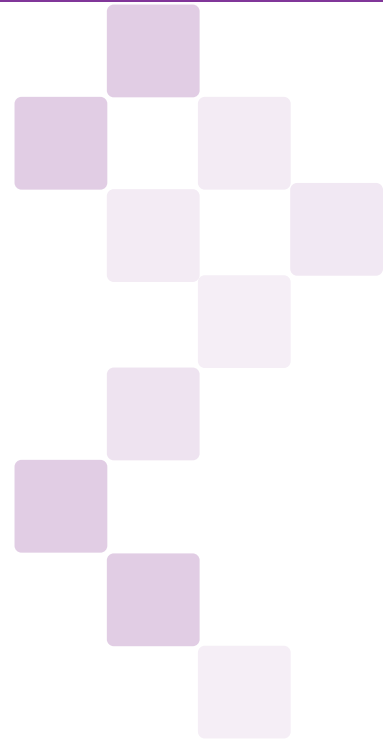


EBOOK

# 5 Ways DCIM Software Supports EU Green Deal Compliance



**Sunbird**<sup>®</sup>

DCIM that's easy, fast, and complete

# Introduction

**In the face of climate change, the European Green Deal aims to transform the EU into a leading example of sustainability in which economic growth is uncoupled from resource consumption.**

The European Commission has recently approved a set of proposals with the goal of reducing EU greenhouse gas emissions by at least 55% compared to 1990 levels by 2030. Additionally, they aim to make Europe the first climate-neutral continent by 2050.

Data centers are one of the world's leading consumers of energy. As regulations like the EU Green Deal, EU Code of Conduct for Data Centers, and EN 50600 gain momentum around the world, data centers must actively contribute to a greener future by reducing their energy consumption.

Organizations are now required to report on their data center energy consumption, develop an energy reduction plan, and implement measures to achieve energy savings and sustainability goals, and many data center managers don't know where to start.

However, there is a path forward with Data Center Infrastructure Management (DCIM) software.

Modern DCIM software supports many of the requirements of these regulations and offers ancillary benefits including:

- Real-time monitoring
- More efficient facilities
- Reduced energy consumption
- Compliance reporting
- Cost savings

If your organization must comply with the EU Green Deal or other sustainability initiatives, keep reading to learn why DCIM software is an important tool for the next generation of green data centers.

# 1. Real-time monitoring

Power and environmental measuring and monitoring lays the groundwork for sustainable data center operations. Monitoring serves as the eyes and ears of your data center so you can know what's happening in any site without leaving your desk. It transforms your raw data into actionable insights, drives smarter decision-making, and makes energy reporting easy.

Modern DCIM software is designed to monitor the granular data generated by outlet-metered intelligent rack PDUs with sensors. It can collect 500 data points per rack per minute and is field-proven to collect more than 11 billion data points a day to give you the information you need to comply with regulations.

DCIM software meets EU Green Deal requirements by providing:

- **Energy metering.** Metering incoming energy and IT energy consumption is required by the EU Green Deal. DCIM software automatically collects the live measured readings from your rack PDUs, RPPs, floor PDUs, branch circuits, busway tap boxes and end feeds, UPSs, and building meters. It then stores that information for long periods of time for reporting and analysis purposes. You can also understand energy consumption at all the key points in the power chain where people make decisions to reduce energy consumption.
- **Environmental monitoring.** DCIM software monitors critical environmental parameters such as temperature, humidity, and airflow. Setting thresholds and automatic alerts on environmental sensors enables you to rapidly detect deviations from optimal conditions such as overcooling, hot spots, a humid environment, or inadequate airflow. You can then proactively remediate any issues before they cause additional problems like reduced equipment lifespan or energy waste.

“Currently monitoring over 1k devices/sensors across the United Kingdom with ease.”



John H., Data Centre Specialist

 FROM THE EXPERTS:

“Data center team knows more about the rooms, climate, and power consumption than our facility management.”



Dirk Schröder, System Engineer

## 2. More efficient facilities

Recovering stranded capacity and getting the most out of your existing facilities drive sustainability by reducing resource waste and deferring expansions. Building and maintaining a data center is energy-intensive. Deferring building your next data center, potentially indefinitely, provides a significant reduction in your overall carbon footprint.

DCIM software helps you maximize resource utilization of existing capacity via:

- **Automatic device power budgeting.** “Auto Power Budget” is a machine learning algorithm that enables you to deploy more servers in your existing cabinet resources. With live data from outlet-metered intelligent rack PDUs, it automatically calculates and updates a highly accurate power budget number for each server instance based on its actual load in your environment. Using this feature, Comcast was able to get 40% more utilization out of their existing resources. [Read the case study.](#)
- **What-if analysis.** Simulate one or more projects to determine the impact that adding new equipment or changing existing configurations will have on your rack space and power capacity. This predictive modeling lets you know if you can leverage existing resources for your next project instead of purchasing more.
- **Intelligent capacity search.** In seconds, find the optimal cabinet to deploy new equipment in. Simply search for the model you’re deploying and get a list of all the cabinets with the available space, power, and connectivity capacity for it. Then, you can easily reserve those resources all at once.
- **Correlated capacity reporting.** Get a holistic 2D or 3D view of rack capacity across multiple parameters including space, power, and cooling. Visualize where resources are underutilized or unevenly distributed to help make more informed decisions to redistribute workloads, consolidate servers, or reconfigure equipment layouts to maximize energy efficiency.
- **Zero-configuration analytics.** Pre-configured capacity dashboards with real-time gauge charts by resource type let you know your available capacity at a glance.
- **Built-in power chain intelligence.** Understand the power load and capacity at every hop in your power chain to ensure you can deploy more equipment without tripping a breaker upstream.

“From an ROI perspective, [Auto Power Budget is] massive for us. We’re getting 40% more usage out of our facilities and power sources.”



Michael Piers, Senior Manager DCIM/Tools

### FROM THE EXPERTS:

“With Sunbird’s DCIM software we now have an up-to-minute picture of capacities in all our data centers in terms of power, space, networking, and cooling. As a result, we are able to track our data center capacity more accurately and assess our infrastructure needs for the future.”




Joe Keena, Manager of Data Center Operations

## 3. Reduced energy consumption

To reach carbon neutrality, you will need to significantly decrease how much energy your data centers consume. DCIM software provides insights that empower you to implement measures that will increase energy efficiency and align your operations with your sustainability goals.

DCIM software helps you:

- **Stop wasting energy by cooling.** Increasing temperature set points is one of the most impactful things you can do to reduce energy consumption. Through precise temperature monitoring and easy-to-understand cooling charts and reports, you can identify exactly which cabinets are being cooled outside of your industry- or manufacturer-recommended guidelines and by how much. Safely raising the temperature aligns your cooling resources with your actual needs and slashes energy waste.
- **Find and shut down ghost servers.** Servers sitting idle in your cabinets consume energy and space and provide no useful function, but they can be hard to find without the right tool. DCIM software offers a built-in report that lists all your potential ghost servers based on how much power they are drawing. Adding up their total energy consumption provides an estimate of how much energy you'll save by shutting them down. Removing ghost servers also frees up space which can be used for new services or to improve airflow for other equipment.
- **Increase the efficiency of your private cloud or virtual environment.** Automate and optimize virtual machine management by integrating DCIM software with VMware. Second-generation DCIM software has an out-of-the-box VMware connector that customers report can be set up in just a few minutes. VMware integration lets you map your virtual machines to their physical hosts, of which some will be more energy efficient than others. With this information, you can move virtual instances to your most efficient servers to reduce your energy consumption.
- **Drive more efficient behavior.** Energy cost reports make it easy to understand consumption by data center, customer, service, or application. This information can be used to generate billback reports that accurately charge customers for the energy they use and encourage them to seek out ways to minimize their energy usage. Evaluating the energy consumption of your teams and applications will also uncover power hogs and areas where efficiency can be improved.

 FROM THE EXPERT:

“Sunbird provides the ability to measure, monitor, and document what is actually happening in our data centers. Then, we can implement things to keep the costs down. We can actually measure the individual temperatures in a cold aisle so we can see the Delta-T. That allows us to raise the temperatures in the cold aisle which saves us a large amount of money.”



Andrew Marsh, Senior Manager for Infrastructure and Data Centers



# 4. Compliance reporting

You must document and report your regulatory compliance efforts, and this has never been easier with DCIM software.

DCIM solutions offer transparent KPI tracking with:


- Centralized data collection and documentation.** DCIM software streamlines the complex task of regulatory compliance reporting. By having a single platform to centrally collect and log your data center energy information, you can easily retrieve the required data. This ranges from energy consumption metrics to temperature logs and operational records. With this data readily accessible at your fingertips, you can easily fulfill your reporting requirements. Accurate data center energy consumption information can feed into your enterprise system for corporate sustainability reporting.
- Energy dashboard charts and reports.** With a wide range of standard charts and reports and the ability to create custom charts and reports, tracking and reporting the progress of your sustainability initiatives is simple. You can automatically track the Power Usage Effectiveness (PUE) of all your sites in real-time and trend your PUE to see the impact of your efficiency initiatives over time. Other KPIs include carbon footprint, cabinets compliant with your cooling envelope guidelines, delta-T per cabinet, stranded power capacity per rack, temperature per cabinet, energy cost per business unit, VM to host ratio, facility utilization, and energy metering percentage. Your energy KPIs can be downloaded, printed, and shared via automatically created and scheduled email reports, your corporate portal, or secure links that respect granular, role-based access control. Plus, the underlying data can be sliced and diced any way you want to lead to deeper insights.



“Sunbird lets me sleep better at night because I know that accuracy is not something I need to worry about. I’ve had absolutely no issues.”



Peter Giles, Senior Data Center Manager

 FROM THE EXPERTS:

“Going from Excel spreadsheets to using Sunbird is awesome. We are now able to produce required reports in minutes as opposed to hours.”




Scott Walter, Manager, IT Operations

# 5. Cost savings

DCIM software quickly pays for itself and keeps your operating costs down by enabling you to make data-driven decisions that optimize your data centers.

As it relates to sustainability, DCIM software saves you money by:

- **Energy cost tracking and forecasting.** Tracking energy consumption and cost trends enables accurate expense forecasting. DCIM software unveils potential savings opportunities and illuminates areas where energy consumption can be curtailed without compromising uptime. Armed with data, you can allocate resources optimally and channel expenditures and efforts into initiatives with the highest return.
- **Optimization of cooling systems.** Through real-time environmental monitoring, you can identify inefficiencies, hot spots, and suboptimal airflow. Then, you can enact targeted changes to optimize cooling strategies, ensure cooling resources are allocated precisely where they are needed, and save money by avoiding overcooling and ensuring proper airflow.
- **Extending hardware lifespan.** Proactive maintenance provides a significant financial advantage over time. Tracking detailed information about your assets throughout their lifecycle and ensuring routine maintenance is performed will extend their useful life, deferring replacement costs, carbon emissions from manufacturing, and reducing e-waste. Environmental monitoring allows you to quickly resolve any issues like high temperatures or humidity that may damage your equipment and reduce its lifespan.
- **Getting the most out of existing facilities.** DCIM software empowers you to extract the maximum value from your existing infrastructure. Actionable insights about your resource capacity and utilization leads to a greater understanding of how to optimize layout configurations, allocate resources efficiently, and make informed decisions about expansions. Fully utilizing what you have before expanding significantly reduces the need for expensive infrastructure investments.
- **Demand charge avoidance.** By analyzing historical energy consumption and demand patterns, you can strategically manage workloads, shift tasks, and deploy energy-intensive equipment during off-peak hours to avoid high demand charges on monthly energy bills.
- **Avoiding penalties for non-compliance.** Achieving compliance with sustainability regulations by implementing energy efficient technologies and practices results not only in lower energy costs, but you will avoid steep penalties for failing to demonstrate compliance.

 FROM THE EXPERT:

“Sunbird provides just the right information so that you can really manage very well, very easily. It’s definitely helped us make better, faster decisions. What might have taken us days to gather before is now right at our fingertips.”



Kyle Kohne, Data Center Technician  
& DCIM Application Technical Services Manager

# Conclusion

As the world grapples with the urgent need for sustainability, the EU Green Deal presents a vision for green data centers that can support the growing demand for data center services without harming the environment.

DCIM software plays a pivotal role in supporting compliance with the EU Green Deal's data center requirements. With real-time monitoring, more efficient facilities, reduced energy consumption, compliance reporting, and substantial cost savings, DCIM software emerges as an important solution for driving efficient data center operations.

With the right tools and data, you can help usher in a new era of sustainability and contribute to a brighter, greener future for all.

## Other resources to help you increase data center sustainability:

- [Top 30 Data Center Sustainability Metrics](#)
- [World's Leading Data Center and Cloud Operators with Zero Carbon Goals](#)
- [Green Data Centers Around the World](#)
- [How to Safely Avoid Overcooling Your Data Center and Save Money Today](#)
- [How to Measure Data Center Sustainability](#)
- [10 Best Practices to Reduce Your Carbon Footprint](#)
- [5 Ways DCIM Software Improves Data Center Sustainability](#)
- [8 Ways to Ensure a Green Data Center](#)
- [How DCIM Software Improves Data Center Energy Efficiency](#)
- [6 Best Practices to Increase Data Center Energy Efficiency](#)



# Take the Next Step with Sunbird



## Schedule a Personalized Demo

Get a one-on-one live tour of our modern data center management software with a DCIM specialist.

[Schedule a Demo Now](#)



## DCIM Operations Online Demo

Remote 3D visualization of all your racks, assets, power, and network connections. View 250+ dashboard charts and reports. Know the capacity of all infrastructure items.

[Try it Free](#)



## DCIM Monitoring Online Demo

Remotely monitor rack PDUs, UPSs, branch circuit meters, RPPs, floor PDUs, busways, door locks, and temperature, humidity, and other sensors. See trends and get alerts.

[Try it Free](#)