



The State of Operational  
Intelligence in NNN Industrial

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# Content

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Introduction	03
Carbon Reporting	04
Enertiv Case Study: Rapid Shadow Metering in Multi-Tenant Industrial	06
Tenant Engagement	08
Capital Planning	10
Conclusion	11

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# How industry-leading portfolios are adapting to an evolving market

It barely needs mention: industrial real estate has been on a tear in recent years.

Rents have been increasing consistently, reaching a record high of \$7.15 per square foot in March, 2023. Likewise, vacancy rates remain low nationwide, averaging only 3.9%<sup>1</sup>.

It has continued to perform well, despite the impact of rising interest rates on property valuations.

Still, demand for space and transaction volumes have already started to normalize as tenants react to a slowing economy and rising operating expenses.

At the same time, the expectations from investors, tenants and regulators around carbon disclosure have skyrocketed.

The result is an increasingly difficult balancing act. 73% of investors say companies must enhance their ESG reporting, yet 53% of owners say they face short-term earnings pressure from investors, which inhibits them from doing so<sup>2</sup>.

The bottom line is that access to capital is becoming increasingly competitive.

## In response, the industry is broadly focused on three initiatives:



Consolidate gains made during boom market



Increase data visibility, particularly into tenant-controlled or "Scope 3" carbon emissions



Position spaces around sustainability and lower operating costs

For an industry that is accustomed to being completely hands-off with operations, these can be challenging actions to get off the ground.

But industry leaders have blazed a trail to meet the expectations of the modern market. Mistakes have been made and solutions have been found. The following is an overview of those insights.

1. [Industrial Sector Ends Q1 with Strong Fundamentals Amid Continued Economic Woes](#)

2. [Businesses and Investors at Odds Over Sustainability Efforts](#)

# Carbon Reporting

Over \$62 trillion worth of assets under management have contributed to the Net Zero Asset Managers Initiative<sup>3</sup>.

The SEC is finalizing carbon disclosure rules that will likely require auditable reporting on tenant-controlled emissions.

The trend is clear: industrial owners need to gain access to utility data that is currently paid for (and thus controlled) by tenants.



## Pitfalls to Avoid

Given the need for tenant utility data, first attempts have naturally gravitated to:

- 1 The tenants
- 2 The utilities

Landlords have approached tenants with requests for their utility data in a number of ways.

Some have pursued more informal requests. A common challenge here is that the landlord's contact is often not the same person at the tenant company that deals with utility data.

Another unfortunate challenge is that tenants can be initially cooperative, only to change their mind later. This obviously results in data gaps, both geographically and over time.

Other landlords have pursued legal authorization through the use of Green Leases - essentially adding clauses that require tenants to share their utility data.

### **This can be effective, but also comes with known obstacles:**

- 1 Often, it requires waiting until there's turnover in a space, which is simply too slow for urgent reporting requirements.
- 2 It can cause tension with tenants, and some large tenants will flatly refuse.
- 3 Even with a Green Lease in place, some utilities have required monthly authorization to release the data.

The alternative approach, to go straight to the utilities, has often been a nonstarter. The labyrinth of bureaucracy and approvals needed makes it nearly impossible.

3. [Net Zero Asset Managers Initiative](#)



## A Better Solution

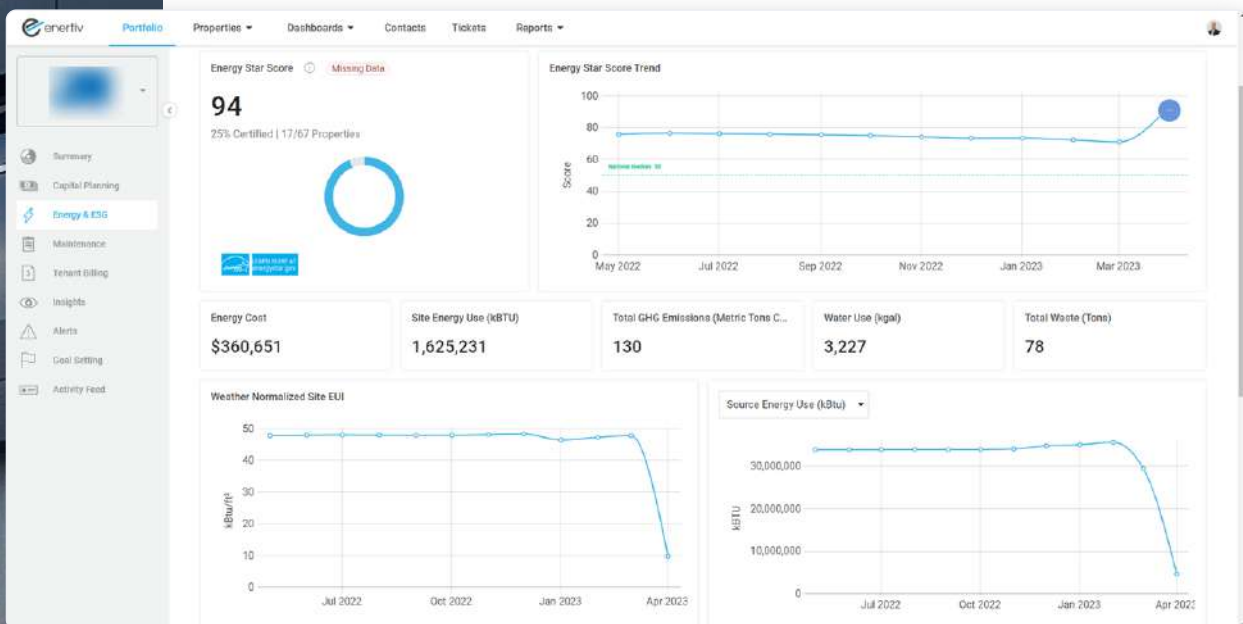
The concept of shadow metering is not new; however, the falling costs of hardware, the application of AI to derive more value from the data, and streamlined installation processes have brought it back to the forefront.

The approach is simple: while tenants pay for the utility bills, the landlord does own the infrastructure.

Shadow metering takes advantage of this by deploying redundant meters with the current utility metering infrastructure.

The data is captured, in real time, and available to landlords.

This raw data can then be translated into carbon emissions equivalencies and synced to reporting frameworks. Energy Star Portfolio Manager is the most obvious, as it serves as the foundation for the “E” of many ESG reporting frameworks, including GRESB.



## Benefits

The first and most obvious benefit is that the data needed to fulfill investor and regulatory requirements is available, where it wasn't previously.

Again, as capital markets tighten, competition for dollars will increase. An increasing share of dollars are only available to those who can report on their carbon footprint.

Beyond simply reporting, this data also helps identify and prioritize retrofits for decarbonization, such as LED lighting and HVAC upgrades.



## ENERTIV CASE STUDY

# Rapid Shadow Metering in Multi-Tenant Industrial

## Context

As a global real estate investment firm with assets under management of over \$115 billion, the portfolio spans multiple asset classes, geographies and positions in the capital stack.

Since 2020, Enertiv has been an integral partner in the office product, helping to replace over 53 unique software vendors into one consolidated platform across 50 assets and delivering over \$1.2M in operating expense savings (translating to over \$23M in asset value).

Recently the firm asked Enertiv whether they could help in their industrial portfolio as well.

That was on August 3rd, 2022.

## Problem

Due to pressure from the capital markets, as well as upcoming regulatory changes, the firm needed to report on carbon emissions.

The challenge is that the industrial portfolio is triple net leased. Tenants pay for their own utility bills and therefore own the data. Attempts to ask for data sharing had been slow and spotty.

Enertiv put together a proposal for shadow metering. Compared to the deployments in the office portfolio, which included BMS integration, equipment-level monitoring, air quality and occupancy tracking and replacing multiple workflows, the scope of work for industrial was straightforward.

## Strategy

In partnership, it was decided to focus on a strategically important group of assets in the Salt Lake City submarket.

Pricing was established and the contract was signed. This kicked off Enertiv's digitization and installation process.

## Results

By October 2nd, only 60 days after the initial conversation, Enertiv had created a digital repository for all metering information, completed installation of the shadow meters, and deployed networking to flow data into the cloud in real time.

At the same time, Energy Star Portfolio Manager accounts were set up and synced with the data in Enertiv.

Following landlord setup, each tenant was provided with a dedicated tenant portal to view their real-time consumption.



### What's Next

Given the speed of deployment, and the practicality of the solution to an acute challenge, the firm is looking to roll out shadow metering across their US and European industrial portfolio.

In addition, now that tenant data has been baselined, Enertiv's analytics are providing tenants with real-time alerts and insights when normal schedules are violated or optimization are identified.



# Tenant Engagement

**58%** of industrial tenants already report on their own carbon footprint.<sup>4</sup>

**89%** of tenants are more conscious of sustainability than pre pandemic.<sup>5</sup>

**11.3%** increased in utility expenses for triple net tenants in last 12 months.<sup>6</sup>

Tenant expectations have changed. Leading landlords are providing more than four walls and a roof. They are providing data and services that help tenants meet their goals.



## Pitfalls to Avoid

Tenant engagement has never been in the vocabulary of triple net industrial owners.

Many are proud that their business doesn't involve the operational complexities of other property types.

But times change. Many tenants are under the same reporting and decarbonization pressures that landlords themselves are under.

And even though they own the utility data, bills themselves are difficult to centralize and report on. Given this, and the inherent connection between real estate and carbon footprint, tenants are expecting support from landlords.

In many cases, the engagement has been ad hoc, such as property managers calling on tenants or sending out a survey.

Either way, results are bound to be spotty. Worse, this approach is asking something from tenants without providing any value up front.

4. [Green Leases Show Commitment to Reduce Carbon Emissions](#)

5. [COVID-19 Pandemic Impact 9 in 10 Views on Sustainability](#)

6. [Electricity Prices Surged, Double Overall Inflation](#)



## A Better Solution

Shadow metering has benefits beyond simply carbon reporting and disclosure.

That's because the data is available in real time. For tenants that are used to tracking their utility consumption through monthly utility bills, this is a significant improvement.

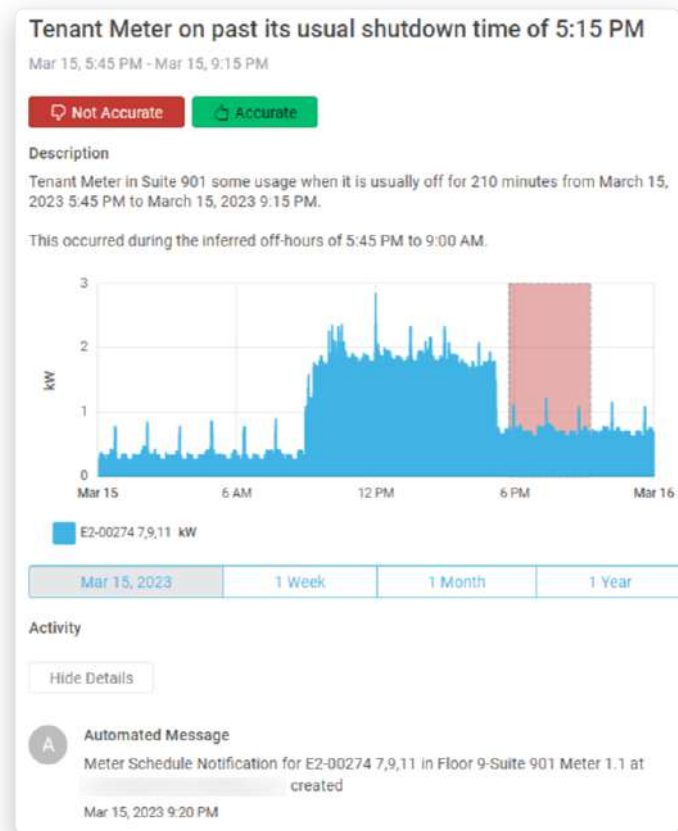
In fact, the landlords can offer an automated sync to Energy Star for Tenants on the tenant's behalf to streamline their disclosure process.

As valuable as providing reporting support is, the application of AI has expanded on the value by an order of magnitude.

Today, leading operators are not only providing their tenants with online portals through which they can view their consumption, they are providing real-time alerts around opportunities for improvement.

For example, AI can automatically infer the operational schedule of a tenant.

Should that schedule be violated in a way that suggests that equipment has been left on, the tenant's facility manager will receive an automated alert.



## Benefits

The most important thing to remember is that tenants are feeling the same pressure to report on their carbon footprint and decarbonize their operations over time.

In the fierce competition for leasing, being able to promote that the property provides value add services like around Energy Star reporting and real-time alerts can be a driving factor.

Likewise, energy expenses are rising faster than core inflation. Marketing that the property is designed to reduce wasted expenses will also drive more leasing activity.

# Capital Planning

Collectively, owners miss their capital budget projections by over \$12 billion annually.

A significant reason for this is the lack of visibility into operations and maintenance in triple net leased assets.

As the cost of capital increases and the focus on decarbonization intensifies, firms that can better forecast will find a significant competitive advantage.



## Pitfalls to Avoid

A common way to allocate responsibility for HVAC management is to have tenants pay for maintenance and repairs, while the landlord pays for replacement.

That gives tenants, especially those nearing the end of their lease, an incentive to do only the bare minimum to avoid equipment failing due to negligence.

The strategy most often employed to correct for this is to require tenants to have contracts with approved HVAC service companies, and assume the work is being done.

The common challenge is keeping track of compliance with these policies.

Even for infrastructure, such as roofs (or shadow metering), that are wholly the responsibility of the landlord, keeping track of projects in spreadsheets turns out to be a nightmare.

As the portfolio grows, the number of condition assessments, budgets, and forecasts piles up. Each budgeting season becomes a little longer and more difficult.



## A Better Solution

There are a number of tactics that can help to transform the risk and pain associated with capital planning into a competitive advantage.

They can be deployed individually, although each course of action builds on the last, creating exponential value compared to each one individually.



## Digitization & Inventory

Thanks to improvements in mobile survey applications, asset inventories can be digitized in a couple of hours per site.

This inventory serves as the foundation for everything else, so it's a crucial first step.

## Work Orders

Whether equipment is the responsibility of tenants, outside vendors, or even in-house property teams, it's critical to know that the right work is being completed at the right time.

Instead of just stipulating that tenants must hire a qualified third party HVAC contractor, software can both stipulate best practice maintenance checklists and verify the work is being performed.

All of this can tie in neatly to the tenant engagement around ESG. If tenants do have to submit a ticket to the property team, they can do so through the same tenant portal that provides their real-time consumption data, utility bills and alerts.

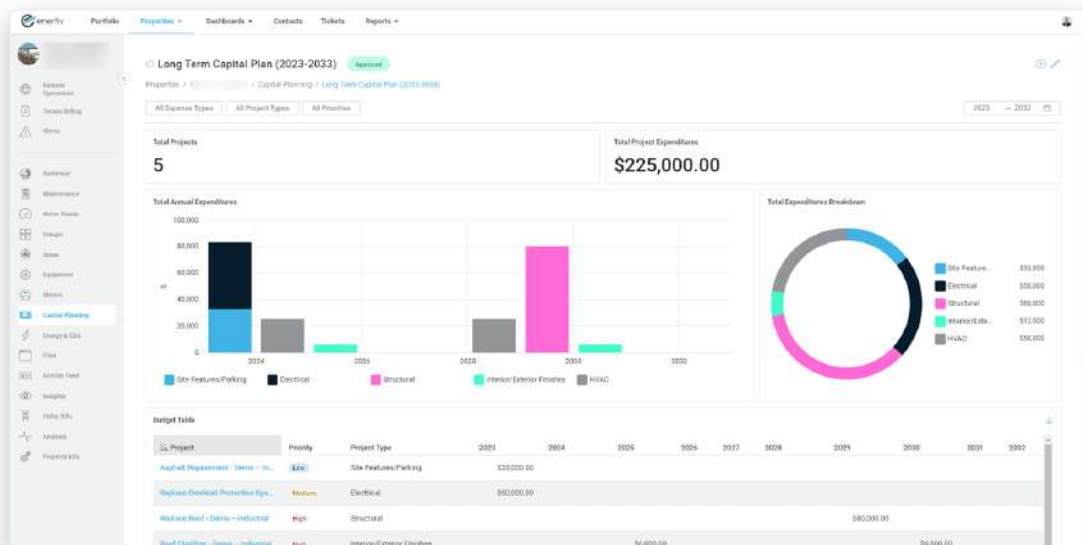
## Capital Planning

If the previous steps have been implemented, there is now a full equipment and infrastructure inventory, along with up-to-date conditions of each asset.

This data flows into capital planning software, which replaces the spreadsheets budgets and allows for documentation to be attached directly to a project.

These budgets are rolled up to the portfolio level, allowing for bulk purchases, better prioritization and a clear understanding of capital requirements year over year.

This could even be applied for the shadow metering outlined earlier.



## Equipment Monitoring

Even the best maintenance programs cannot catch everything. In fact, 82% of equipment failures occur at random, meaning preventative maintenance can only prevent 18% of repairs/replacements.

To account for this, real-time monitoring can be deployed to track HVAC units. When issues are detected, alerts are automatically sent to the tenant and vendors responsible for equipment.

Implementing corrective actions early in a failure often makes the difference in whether an early replacement is required.



## Benefits

The benefits of digitized operations & maintenance and capital planning flow to both tenants and landlords.

For tenants, having their vendors be able to access an existing inventory, see maintenance histories and follow best practices helps keep operating expenses down.

For landlords, better maintenance translates to lower capital requirements and better forecasting and budgeting.

Perhaps more exciting, it saves a lot of time during due diligence at disposition and can even be a factor in increasing the price of the property (by lowering unexpected CapEx risk).

## Conclusion

The boom times in industrial real estate are slowing down.

And while few expect a decline, the growth over the past few years have encouraged new market entrants and greater competition.

Combine that with rising operating costs for tenants and capital costs for landlords, a new set of expectations around ESG, and regulatory reporting, and it's clear that times have changed.

While change always brings some uncertainty, it is always relieving to know that peers are solving for the same problems and in many cases have settled on a solution.

The key is to learn from them, avoid their mistakes, and use their lessons to maintain a competitive edge.





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