Enabling teams to run buildings with ease

Overview of our Building Analytics offering

TOPICS

1. The problems Building Analytics software solves for building owners
2. How our Building Analytics software works
3. What outcomes you can expect from Building Analytics software
4. Why our Building Analytics solution is different
5. Typical Onboarding & Commissioning timeframe
6. Cyber security credentials
7. Next steps

1. What problems does good building analytics software solve?

Operations

Frustration	Uncertainty	Anger
Lack of real-time building data	Unable to monitor critical equipment	Slow Thermal comfort issue resolution

Financial

Doubt	Concern	Anxiety
Maintenance opex spend increases	Energy consumption increasing YoY	Limited availability of CAPEX

People

Worry	Fearful	Stress
Unhappy tenants, and stranded assets	On IEQ compliance for tenants	Limited contractor performance tools

{Your logo here}

2. How our building analytics works:

2. Simple four step process:

Collect

Unlock and **clean** real-time data from building systems in a unified platform.

Monitor

Intelligent 24/7 **analysis** of energy, equip and indoor env data to catch issues.

Improve

Guidance and tools to fix problems and improve **performance**.

Benchmark

Compare building performance against targets and peers.

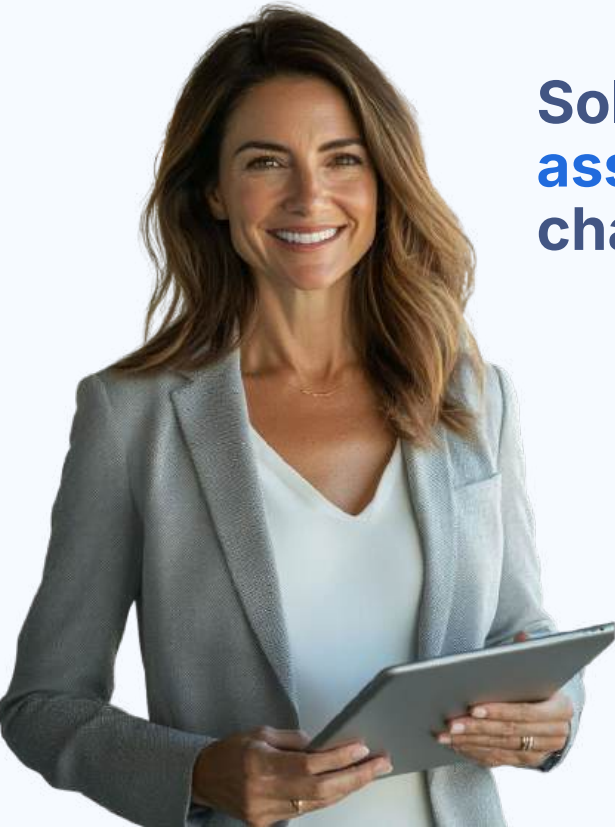Designed for real people running buildings, not just experts.

2. Asset Class Agnostic

Office

Retail

Cultural

Airports

{Your logo here}

Hotels

Universities

Healthcare

Proven to deliver results across **>500 buildings** globally

3. Outcomes from Building Analytics

Solves critical **asset management** challenges

Enhancing operational visibility

Improving Net Operating Income

Rating and green lease protection

Delivering optimum tenant experience

Reducing CAPEX risk

Smarter CAPEX decisions

3. Case Study Commercial office portfolio (60 buildings / 1.5m sqm)

- **99,311,718** HVAC data points/day
- 147,521 individual **FDD rules**

- **127,241 I**ndividual HVAC plant
- 244 PEAK **active users**

- **44,250** Thermal zones

Utility Reduction

Electricity
€12m

Gas
€4.9m

Water
€2.1m

Ratings improvements

Energy
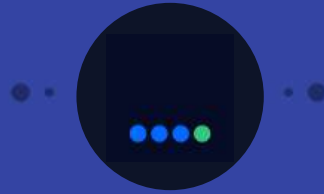**71%** sites with improved Energy ratings

Water
51% sites with improved Water ratings

IEQ
0.3 Industry average exceeded by 0.3

# 4. Why our Building Analytics solution is different

- Digital workflow
- Critical equipment alerts
- User engagement
- User experience (UX)
- Vendor benchmarking
- Onboarding speed
- Software led technology

5. Typical Onboarding & commissioning timeframe

Our AI-driven onboarding process ensures that all available BMS, utility, and sub-meter data points are fully commissioned <u>within 30 days</u>.

- Raw BMS text is run through our proprietary machine learning model predicting the equipment type to speed up site commissioning, and eliminating inaccuracies

- PEAK's anomaly detector accurately labels and maps BMS points, enhancing system efficiency and reliability.

- PEAK automatically identifies the data for >90% rule coverage to save time and improve accuracy.

Typical site deployment plan
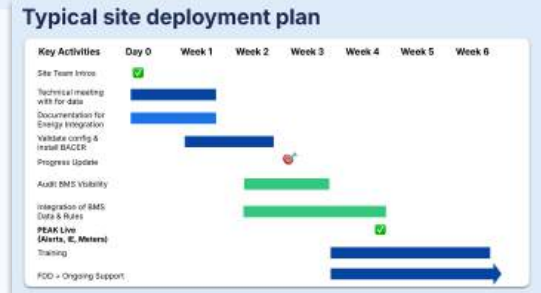
Site and portfolio rollout - integration phase

5. Onboarding 30 day plan

Proposed key milestones and timing for first site

Key Activities	Wk 1	Wk 2	Wk 3	Wk 4	{ongoing}
Provide BMS network configuration details	Client-lead				
BACERs delivered to client		Partner-lead △			
Installation and connection of BACER at sites			Partner-lead		
Integration (Points Mapping & QA)				Partner-lead	
Rules Deployment & QA					Partner-lead
Data Integration Complete				△	
Tailored platform training	Partner-lead	Partner-lead	Partner-lead	Partner-lead △	Partner-lead

{Your logo here}

6. Cyber security credentials

High-security pedigree

Our software has been deployed on a wide range of high-security assets including airports, banks, government and high-tech manufacturing facilities.

Built on AWS and Intel

Our software is built and hosted on AWS. Our data acquisition device (BACER) is manufactured by Intel with a 100% track record of passing client IT security assessments.

Comprehensive policies

We have comprehensive and detailed IT security policies covering areas such as data archiving & retention, passwords, vulnerability and disaster recovery.

Ongoing commitment

We run two automated patch schedules (weekly & monthly) and can deploy a patch for critical updates within 15 minutes. We also undertake an annual penetration test with a 3rd party provider.

7. Next steps

Three simple steps:

1. Complete the Smart Building Assessment (SBA) form

2. Introduce us to your cyber security team

3. Confirm 'go-live' timeframe

4. Agree on success criteria

{Your logo here}

APPENDIX

Suggested Pilot success metrics (first 60 days)

#	Success Metric		Progress
1	Compliance with cyber security protocols		
2	Real-time BMS data being ingested into software		
3	All points commissioned & relevant rules deployed		
4	Alert accuracy and QA complete		
5	Real-time utility meter data being visualised		
6	First building onboarded in <30days*		
7	Onsite operations team trained		
8	Energy savings / Thermal comfort wins being achieved		

*date from when BACER starts to ingest site data

Indicative Optimisation timeline

12 months to maximise and accelerate building performance

1st quarter

2nd quarter

3rd quarter

4th quarter

Onboarding & Commissioning of building on PEAK

Training of site team and contractors

M&V reporting

Energy efficiency audit

Optimisation workshop

Seasonal tuning

Bespoke HVAC controls strategy setup

Seasonal tuning

Optimisation workshop

M&V reporting

Seasonal tuning

Optimisation workshop

AI Machine Learning to ingest and clean data

Challenge: Buildings have a lot of data and its not consistent

Unstructured machine data

...
NIE-B5/BACnetIP.Daikin
FCU.AI-265

NIE-B5/Modbus.MSB-B-H-
CB25.2-Power

23606_Analog-Input
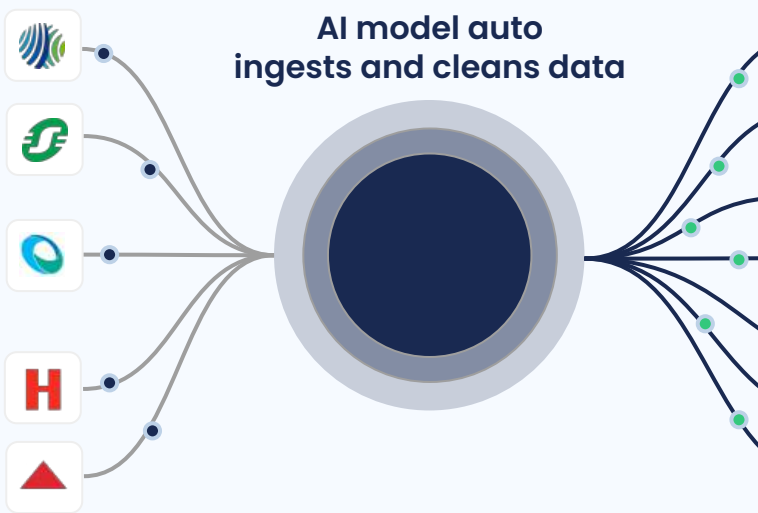instance-23606

L04_CHR_CT-04-2_Basin_
Leaving_Temp

NIE-B5/FCB.Local
Application.FCU-4 (Lobby)

NIE-B5/FCB.Local
Application.FCU-1 PIR-S

4_L45_OL_CT-45-2_Inlet_Is
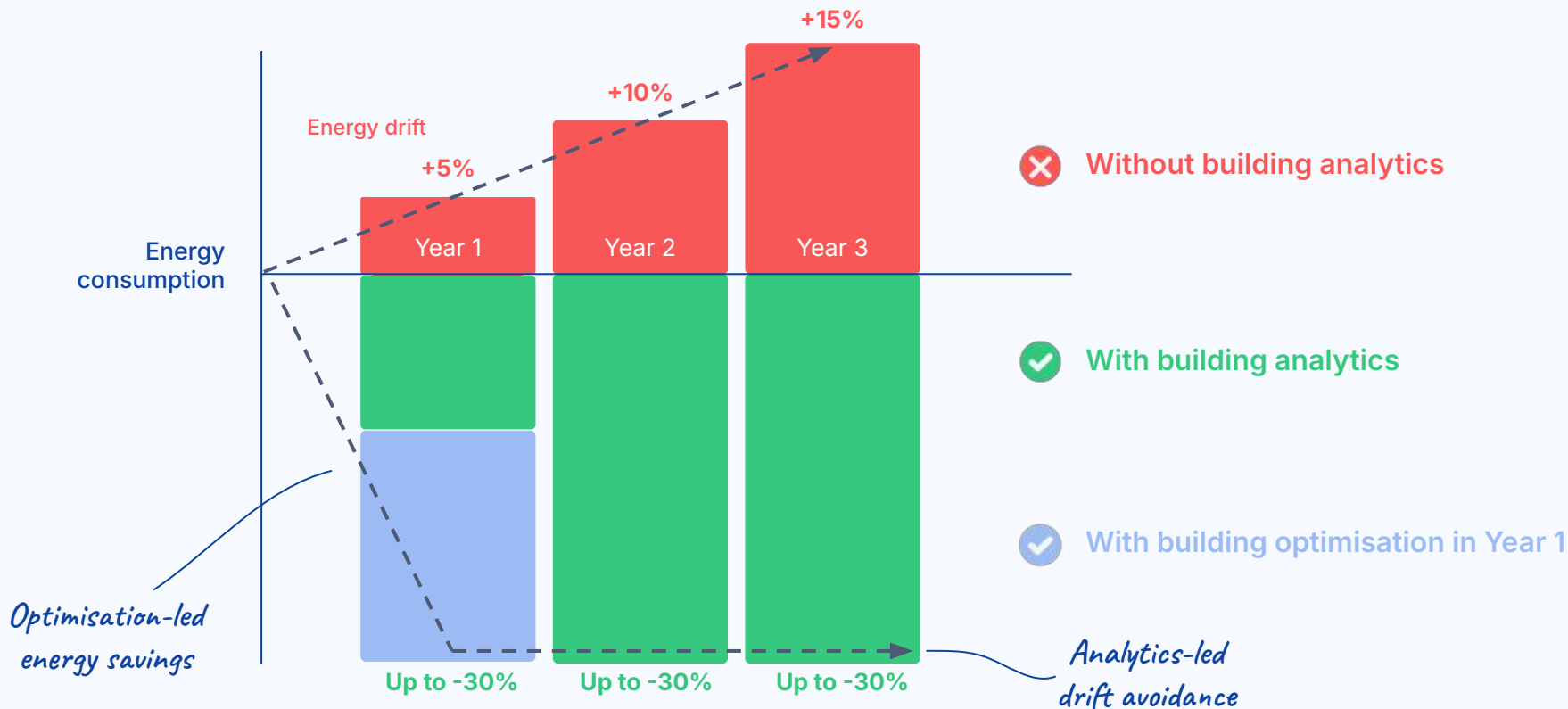oVlv_Command

NAE-B1/N2-1.VMA-36.VAV
1B-NW3 ZN_DPR

...

**AI model auto
ingests and cleans data**

Clean structured data

Site	42 Market	33 George	12 Clare
Equipment	CT-04	CH-02	AHU-T2
Category	Cooling T	Chiller	Air Handler
Sensor type	Water temp	Power	Motor speed
Location	L16, Roof	B-2, Plant	L12, CBA
Reading	23.21°C	18	95
Timestamp	2024-05-01 9:47:56	2024-05-01 9:52:12	2024-05-01 9:46:12

# The energy-saving power of Building Analytics

Less efficient buildings

Energy drift

+15%

+10%

+5%

Energy consumption

Year 1   Year 2   Year 3

Up to -30%   Up to -30%   Up to -30%

❌ **Without building analytics**

✅ **With building analytics**

✅ **With building optimisation in Year 1**

Optimisation-led energy savings

Analytics-led drift avoidance

The energy-saving power of Building Analytics

Efficient buildings

Energy drift

+15%

+10%

+5%

Year 1

Year 2

Year 3

Energy
consumption

❌ Without building analytics

✅ With building analytics

Up to -10%

Up to -10%

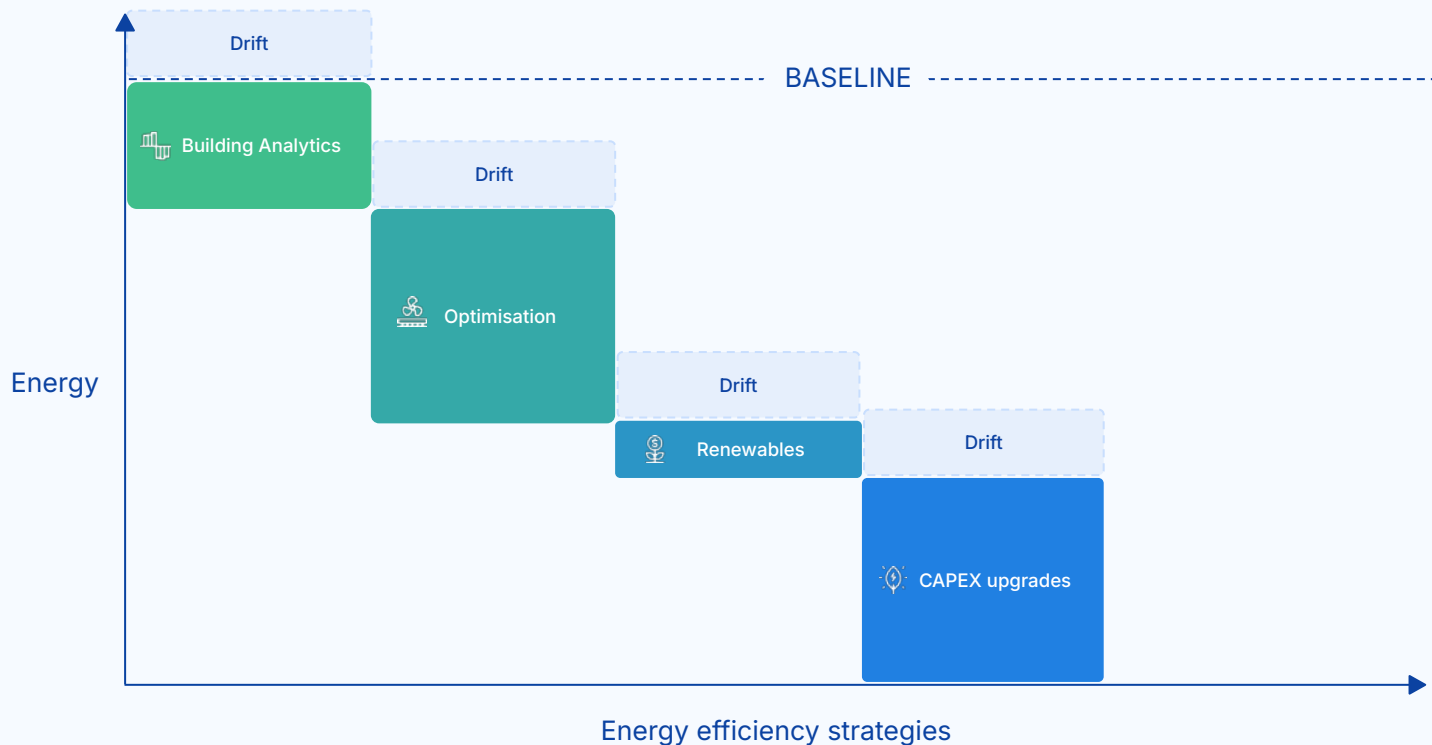Up to -10%

Analytics-led
drift avoidance

Roadmap to Net Zero

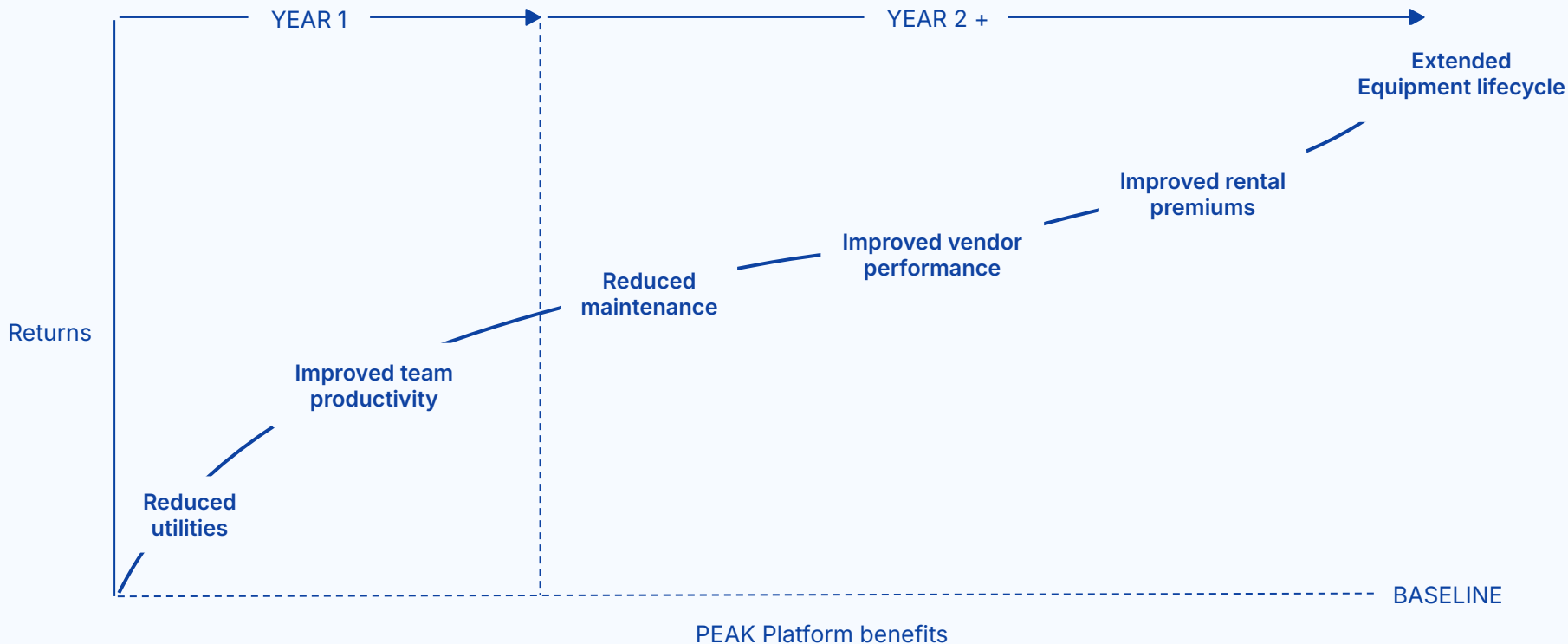The five key strategies to reach Net Zero, underpinned by building analytics
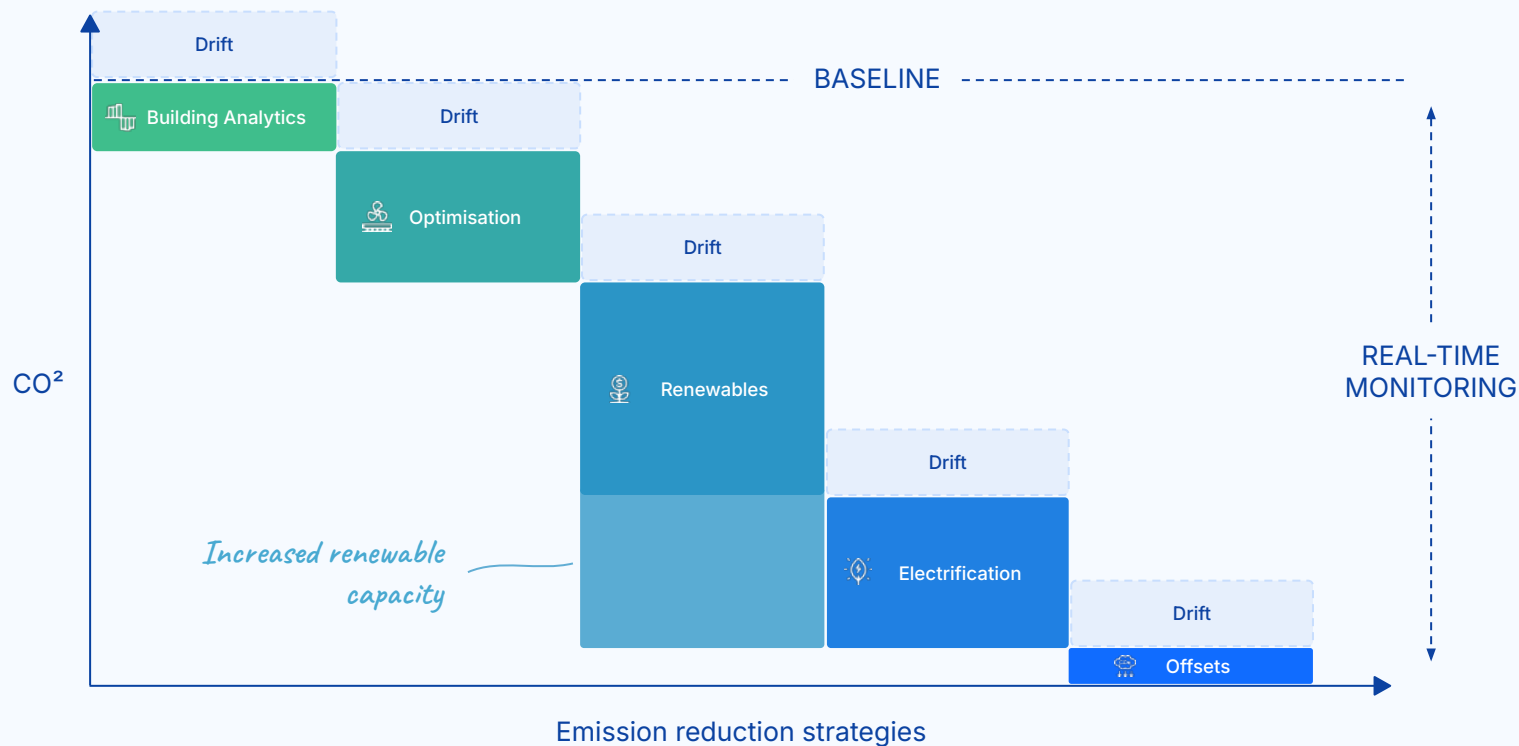
Sustainability rating improvement

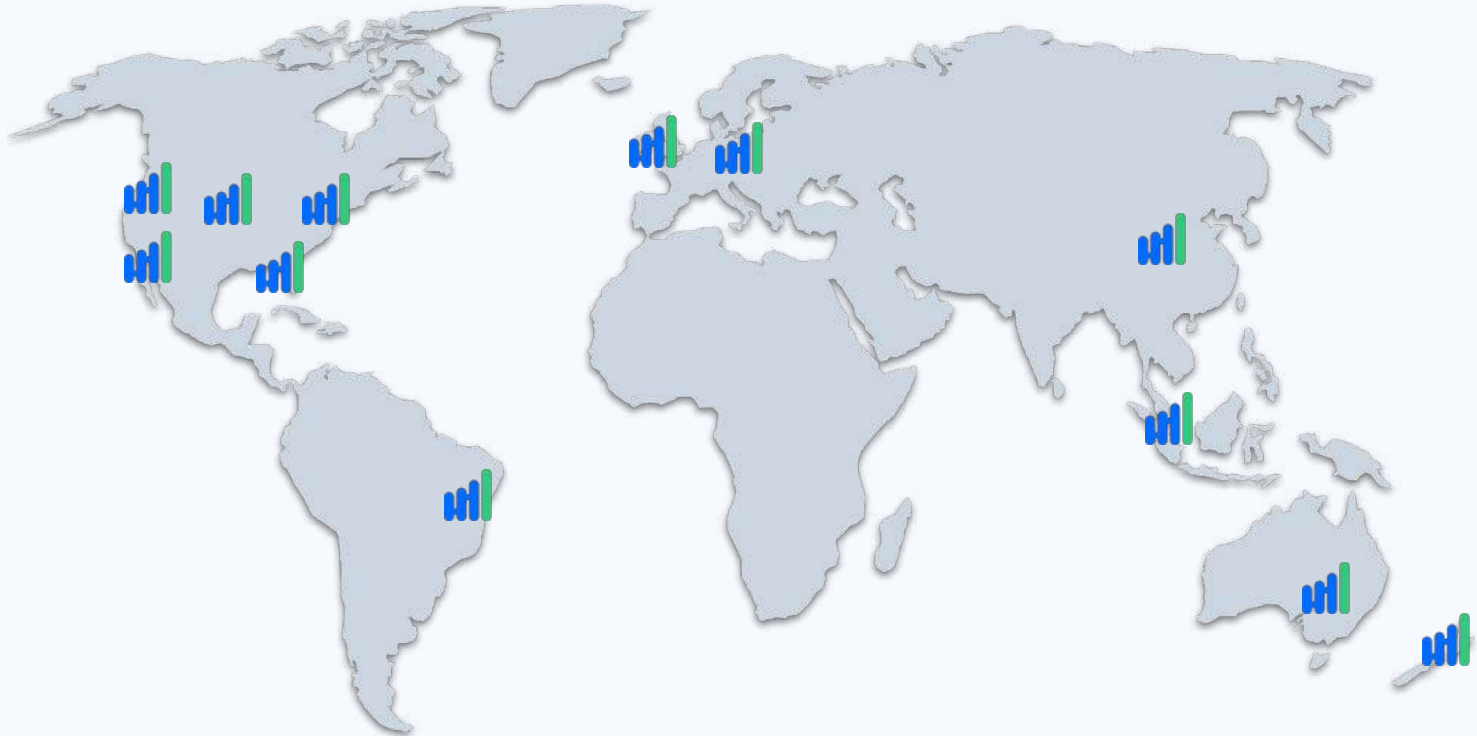The data-driven approach to improving and protecting ratings

Improving returns

How building analytics improves asset value and investment returns

YEAR 1

YEAR 2 +

Returns

Extended
Equipment lifecycle

Improved rental
premiums

Improved vendor
performance

Reduced
maintenance

Improved team
productivity

Reduced
utilities

BASELINE

PEAK Platform benefits

A trusted global solution

Proven across >500 Building deployments

Real-time BMS data - virtual data collection
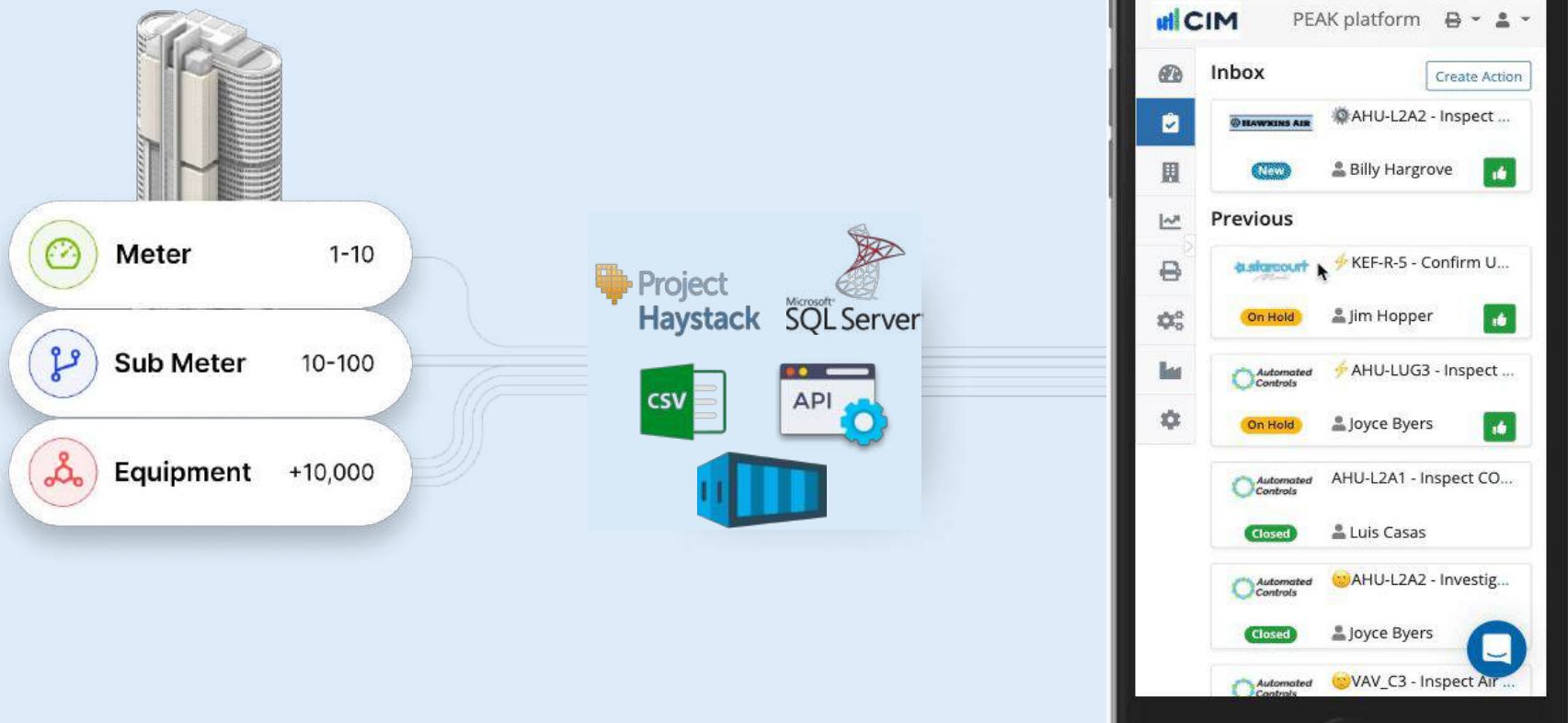
A highly rated platform

Independent ratings and awards

Capterra

4.7/5

★★★★½

62 reviews

Capterra

8.9/10

Likelihood to recommend

AFR

FINANCIAL REVIEW
SUSTAINABILITY
LEADERS 2023
IN ASSOCIATION WITH BCG

Sustainability Leaders
List 2023

Software industry leadership

Best Customer Support:
Maintenance

Software Advice
BEST
CUSTOMER
SUPPORT
2024

Best Customer Support:
HVAC

Software Advice
BEST
CUSTOMER
SUPPORT
2024

Best Customer Support:
Energy Management

Software Advice
BEST
CUSTOMER
SUPPORT
2024

2024 Shortlist:
Building Maintenance

Capterra
SHORTLIST
2024

Category Leader:
Building Maintenance

GetApp
CATEGORY
LEADERS
2024

Front Runners:
Building Maintenance

Software Advice
FRONT
RUNNERS
2024

PEAK Platform

IMPROVE PROTECT

CIM's best-in-class AI-powered analytics platform that improves the financial and environmental performance of portfolios.

- Utility monitoring
- Equipment monitoring
- IEQ monitoring
- AFDD rules engine
- Alert notifications
- Digital workflow
- Sustainability ratings
- Dashboards and reports

Utility monitoring

Use PEAK Meters to uncover your building's electricity, gas and water usage at both a high and granular level.

- Perform trend, sub-meter and load profile analysis.
- Identify areas of excessive or abnormal consumption.
- Visualise trends using various chart formats and export data and charts.
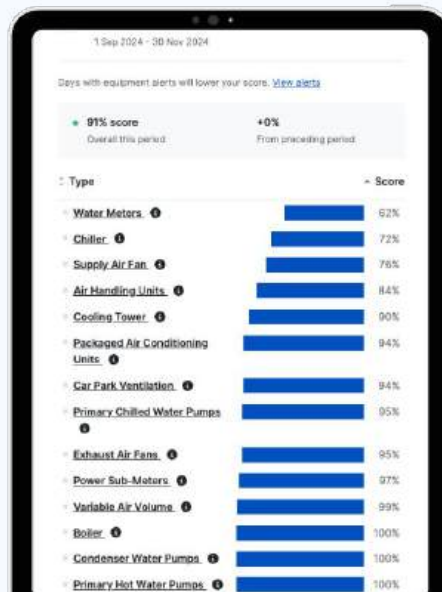
Equipment monitoring

PEAK monitors all critical equipment in real-time, ensuring every building operates at its most efficient performance level.

- View equipment uptime and identify low performing equipment across your portfolio.
- Review alerts to understand root-cause of faults, steps to resolution and timeline for maintenance.
- Use equipment score to guide strategic capex planning and maintenance decisions.

1 Sep 2024 - 30 Nov 2024

Days with equipment alerts will lower your score. View alerts

91% score	+0%	
Overall this period	From preceding period	

Type	Score
Water Meters	62%
Chiller	72%
Supply Air Fan	76%
Air Handling Units	84%
Cooling Tower	90%
Packaged Air Conditioning Units	94%
Car Park Ventilation	94%
Primary Chilled Water Pumps	95%
Exhaust Air Fans	95%
Power Sub-Meters	97%
Variable Air Volume	99%
Boiler	100%
Condenser Water Pumps	100%
Primary Hot Water Pumps	100%

IEQ monitoring

PEAK ensures you maintain optimal conditions and a high NABERS IE rating by tracking temperature and relative humidity in real-time.

- AI-powered algorithms continually monitor every temperature sensor to detect and resolve faults or anomalies.
- Continuous monitoring ensures tenant comfort, IE ratings improvement and portfolio benchmarking.
- Tag VIP floors or NABERS IE sensors for priority action

AFDD Rules Engine (automated Fault Detection & Diagnostics)

PEAK's AI-powered automated fault detection & diagnosis (AFDD) Rules Engine contains thousands of pre-configured algorithms to detect critical issues.

- Examples include overnight operation, energy wastage, safety and compliance, tenant comfort, and lift operation.
- Each identified issue includes a recommended solution and a data trend history.
- PEAK's algorithms are all built by highly qualified building engineers to avoid noisy alerts and false positives.
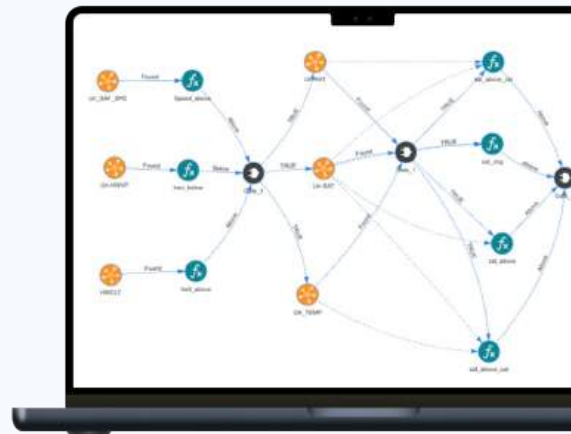
Alert notifications

SERVICE

Customisable alert notifications ensure critical issues get sent to the right person at the right time.

- Your team will know instantly when critical or major equipment failure occurs in the building.
- Site teams can fix issues fast, helping to avoid major issues that could impact lease agreements.
- Set up targeted notifications to your favourite apps like Slack or Teams about the equipment that is most important to you.
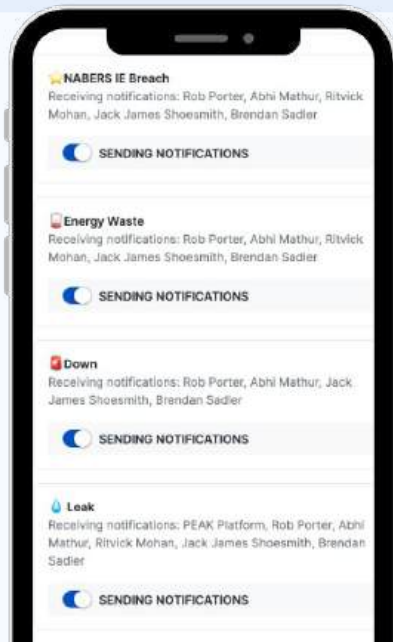
Digital workflow

SERVICE

Intuitive mobile workflow tool where asset teams and vendors can raise tasks, track progress and maintain a complete digital history of activity.

- Site teams can assign to issues to contractors in one click and monitor to progress to rapid rectification.
- Saves contractors significant time as photos and updates can be easily added via their mobile device
- Easily manage collaboration on activities across multiple stakeholders and buildings.
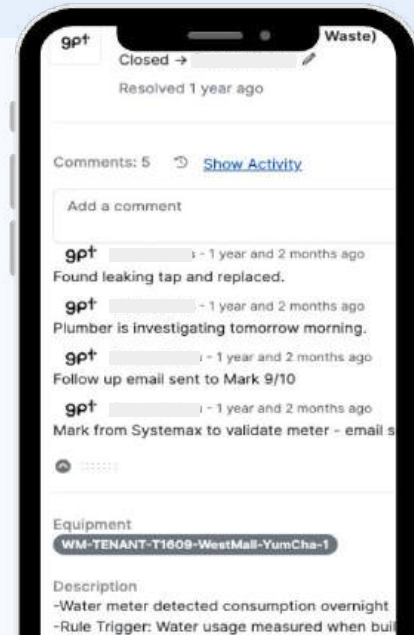
Sustainability ratings

FEATURE   SERVICE

View and share all your ratings in one place and save time by capturing historical and current rating metrics.

- Track ratings movements at an asset and weighted average portfolio level.
- Know exactly when your next rating expiry date is approaching and plan accordingly.
- Compatible with all major ratings - NABERS, BREEAM, Energy Star, etc.
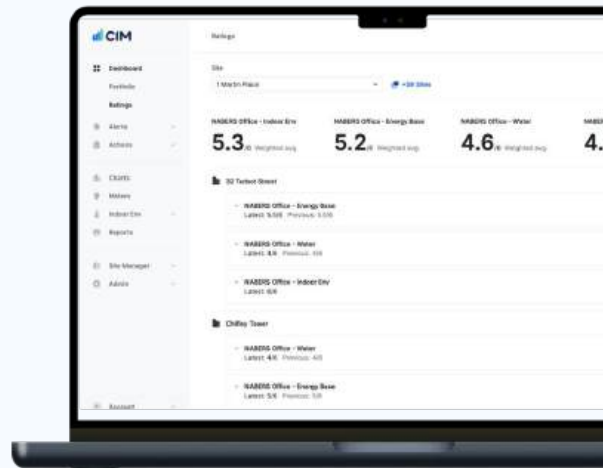
Dashboards and reports

PEAK's dashboards and reports enable Asset and Operation teams to review and benchmark key portfolio and building metrics at anytime.

- Dashboards cover utility consumption, equipment KPI's, contractor activity, IEQ, team performance, lift performance and more.
- Detailed reports enable deep insight into portfolio performance over time, which supports capital planning and resource allocation.
- All PEAK data is also accessible via our enterprise grade API.

Technical Engineering Support

SERVICE

Best Customer Support for HVAC, Maintenance & Energy Management

An experienced point of contact dedicated to ensuring that each building achieves its performance goals.

- Oversees data onboarding, commissioning plus deployment and tuning of AFDD rules.
- Trains site teams and contractors to ensure faster issue rectification and data-driven maintenance adoption.
- Agrees regular objectives with sponsor and works with site team and contractors to ensure completion.
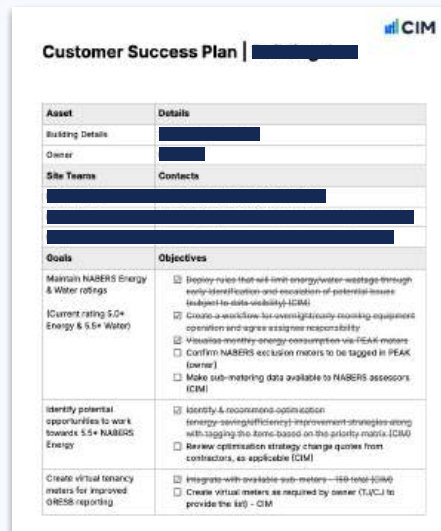
Software Advice
BEST
CUSTOMER
SUPPORT
2024
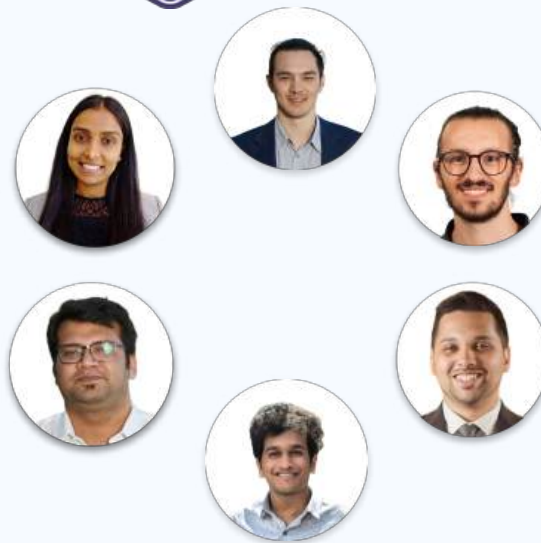
Objective-setting and alignment

FEATURE   SERVICE

Site success plan establishes clear goals and actionable strategies to drive measurable results.

- Performance Engineer collaborates with team to define site-specific goals, targeted actions, and timelines.
- Example focus areas: boosting sustainability ratings, maintaining equipment uptime, transitioning to data-driven maintenance, reducing tenant water usage.
- Progress is regularly reviewed with stakeholders to ensure alignment and adapt actions as needed.

Democratising technology

Graphic Design

Expert designers using Photoshop

↓

Quick, creative designs for **everyone**.

Product

Data experts using SQL and Tableau

↓

Instant insights for **product and marketing teams**.

Online Payments

Finance specialists using banking tools

↓

Simple API to all merchants for **non-finance devs**.

Building Operations

Engineers using closed building systems

↓

Easy data-driven operations for **all facilities teams**.

Advanced algorithms made by expert engineers

Access to growing database of thousands of proprietary algorithms developed by CIM's expert mechanical, mechatronic and electrical engineers based on real world building operating experience.
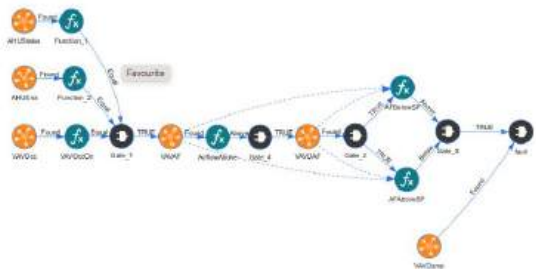
Air Handlers (10-100 equip)	Benefit
Overnight Operation	Energy
Overnight Heating	Energy
Economy Mode Override	Energy
Outside Temp Broken Sensor	Energy
Humidity Broken Sensor	Energy
Supply Air Loss	Energy
Supply Pressure Oversupply	Energy
Supply Temp Hunting	Energy
Hot Water Valve Leak/ Stuck	Mechanical
Chilled Water Valve Leak/ Stuck	Mechanical
Outside Air Damper Stuck	Mechanical
Outside Air Damper Hunting	Mechanical
Return Air Damper Stuck	Mechanical
Return Air Damper Hunting	Mechanical
Status Switch Broken	Mechanical
CO2 Broken Sensor	Comfort
Return Humidity Broken Sensor	Comfort
Unit Not Operating	Comfort
Zone Temp Broken Sensor	Comfort
Filter Dirty	OHS

Variable Air Volume (100-500)	Benefit
Airflow Block	Energy
Airflow Leak	Comfort
Damper Override	Comfort
Damper Stuck	Comfort
Overnight Heating	Energy

Chillers (1-10 equip)	Benefit
Unit Fail/ Fault	Mechanical
Overcooling	Energy
Short Cycling	Mechanical
Leave Temp Broken Sensor	Energy
Return Temp Broken Sensor	Energy
Condensor Flow/ Pressure Loss	Mechanical
Evaporator Flow/ Pressure Loss	Mechanical
Condensor Pressure Broken Sensor	Energy
Evaporator Pressure Broken Sensor	Energy
Insufficient Cooling	Comfort
Overnight Operation	Energy

Pumps (3-15 equip)	Benefit
Unit Not Operating	Mechanical
Status Switch Broken	Mechanical
CHW Pressure Oversupply	Energy
Overnight Operation	Energy
Pressure Broken Sensor	Energy
Mismatch CWP & CHWP	Energy

Cooling Towers (1-10 equip)	Benefit
Unit Not Operating	Mechanical
Overcooling	Mechanical
Leave Temp Broken Sensor	Energy
Return Temp Broken Sensor	Energy
Humidity Broken Sensor	Energy
Outside Temp Broken Sensor	Energy

Carpark Ventilation (3-20)	Benefit
CO Broken Sensor	OHS
CO High	OHS
Missed Daily Purge	OHS

Fans (10-50)	Benefit
Not Operating	Comfort
Overnight Operation	Energy

Meters (1-100s)	Benefit
Review Power Meter Spike	Energy
Review Water Meter Spike	Water

Hear from industry leaders

What changed for the better since they switched to PEAK Platform

LaSalle

"The reality is, despite having a collaborative team, that individual asset managers focus on their individual projects. PEAK allows the asset management team, as well as the senior leadership, to see things on a portfolio basis and ensure that learnings from one asset are applied across many. The data we get from the platform certainly informs our decisions, present and future."

Simon Howard
Co-Head of Australia, LaSalle

GPT The GPT Group

"We asked CIM to get involved so they could give us the oversight we needed across all sites and assist our team to continually achieve the highest levels of performance, collaboration and site optimisation possible."

Scott Crellin
National Director, Group Property Operations

QIC

"Scheduled maintenance is now a thing of the past as the data helps us determine precisely when and where maintenance is needed. We can now actively anticipate and prevent breakdowns which means equipment is more likely to last its specified lifespan and we don't have to resort to costly fixes or replacements."

Damien Stacey
National Capital & Planning Manager

Charter Hall

"The platform goes one step further than simply delivering data and analytics; it supplies the insights and central intelligence required to manage our portfolio sustainably and efficiently. This elevates the resilience and long-term viability of our assets, accelerating our approach to addressing climate change and unlocking environmental value."

Andrew Cole
Group Head of ESG

What our customers are saying

Visibility

Integration was incredibly simple. It shows us the issues we have that the BMS doesn't see.

Aidan Lamberth, Snr FM ALFM
3 Office Buildings QLD
32k sqm

...this is exactly the type of information we need as we head into our first NABERS rating

Darren Hynd, Head of Commercial, CBRE
1 Spring, VIC
32k sqm

PEAK is a must for business' who are serious about making a sustainable change to our future

Sam Munro, FM Retail, Knight Frank
Marketown Shopping Centre, NSW
27k sqm

Provides great oversight on our building's mech systems..and ways to optimise our existing HVAC

Justin Patman, Capital Works Mgr, BNE
Brisbane Airport, QLD
80k sqm

Collaboration

Everyone involved is using the same platform...the conversation that results from an action being raised remains on the platform..the handover from one FM to the next is less critical.

Ross Carter, WA Tech Lead CBRE
6 Office Buildings, WA
133k sqm

Takes hassle away from managing building. One stop shop to talk to contractors and track maintenance with transparency

Jacob Handy, FM Colliers
201 Charlotte, QLD
14k sqm

Easy to use for all. Great one stop program for all team members to view and add comment

Paul Matthews, Snr FM GPT
Melbourne Central, VIC
57k sqm

With live data captured, our on-site contractors can efficiently action any request promptly

Sonny Tifa, Ops Manager JLL
International Towers 1-3
280k sqm

Productivity

I have been more efficient and task saturation has been reduced. Eliminates the need to run and analyze daily alarm reports.

Amy Lazor, Ops Manager J&J
Vision Care Plant Jacksonville, US
100k sqm

One can easily forget to follow up on certain things...the reminders to actions is fantastic.

Nick DeLeon, Ops Manager CBRE
333 George, NSW
15k sqm

I love the fault alert system and the fact we can see the trend and logic

Muhammad Ali, Service Mgr QIC
Watergardens Town Centre, VIC
60k sqm

Very user friendly...allows me to action issues in a very timely manner to help improve operation

Wesley Stevens, FM Museums Vic
3 Museum Buildings, VIC
26k sqm

Digitally transforming operations across Charter Hall's office portfolio

The PEAK Platform is improving portfolio visibility, team collaboration, operational efficiency, tenant experience, and environmental performance.

Key Partnership Highlights

→ **58** office sites, covering 1.45 million sqm

→ **2,978** actions closed, 82% closure rate

→ **244** stakeholders using the platform

→ **58** NPS given by FM's at Charter Hall sites

→ **13** data providers consolidated into 1

→ **91%** indoor environment, up from 84% in Apr '21

→ **17.4** million KWh of Energy saved since 2019

→ **$3.8** million saved on electricity since 2019

"The platform goes one step further than simply delivering data and analytics; it supplies the insights and central intelligence required to manage our portfolio sustainably and efficiently. This elevates the resilience and long-term viability of our assets, accelerating our approach to addressing climate change and unlocking environmental value."

Andrew Cole
Group Head of ESG

Data-driven approach achieves 38% maintenance cost savings

Viewing climate change as a 'material' risk to business, QICGRE sought a solution to help it more intelligently manage its multi-billion dollar retail property portfolio, reduce the carbon footprint of its assets and build future resilience.

Key Partnership Highlights

→ **20** retail sites, covering 1.15 million sqm

→ **38%** reduction in maintenance costs

→ **5 years** of increased chiller life cycle

→ **14%** reduction in chilled water consumption

→ **87%** average Thermal Comfort rating

→ **90%** fault closure rate

"Scheduled maintenance is now a thing of the past as the data helps us determine precisely when and where maintenance is needed. We can now actively anticipate and prevent breakdowns which means equipment is more likely to last its specified lifespan and we don't have to resort to costly fixes or replacements."

Damien Stacey
National Capital & Planning Manager

Maintaining high performance across leading office portfolio

A global real estate group has leveraged PEAK to drive operational efficiency, maintain premium ratings, and improve tenant experience - despite the portfolio already boasting efficient performance and highly rated metrics.

Key Partnership Highlights

→ **15** office sites, covering 600k sqm

→ **2** 6-Star NABERS Energy ratings gained

→ **2** 6-Star NABERS Energy ratings maintained

→ **90%** indoor environment, up from 68% in Jan '22

→ **17%** portfolio energy reduction

→ **1,400** actions raised at 89% closure rate

"We consider the use of the PEAK Platform as part of our strategic sustainability framework... We're delighted with the role PEAK has played to bring two more assets up to a 6-Star NABERS Energy rating."

National Capital Works & Sustainability Manager

Increasing sustainability ratings and driving down utility costs

A leading Australian property group is utilising PEAK across a portfolio spanning more than 50 assets. Platform efficiencies have facilitated substantial utility savings, while improving or maintaining NABERS ratings.

Key Partnership Highlights

→ **50+** asset portfolio over 1 million sqm

→ **66%** of assets increased NABERS energy rating

→ **56%** of assets increased NABERS water rating

→ **47** NABERS IE ratings achieved

→ **$4m** in annualised utility savings

→ **300+** stakeholder engaging on the platform

→ **8k+** actions closed to date on the platform

→ **63** NPS given by stakeholders

"The CIM platform provides a great oversight of my precinct, allowing me to monitor activity in real-time and identify areas for improvement. This valuable tracking data also assists in achieving NABERS energy and water efficiency ratings, which can translate to improved or sustained ratings."

Senior Precinct Manager

Data-driven maintenance

Harness the transformative power of AI and analytics to align maintenance with industry best-practice
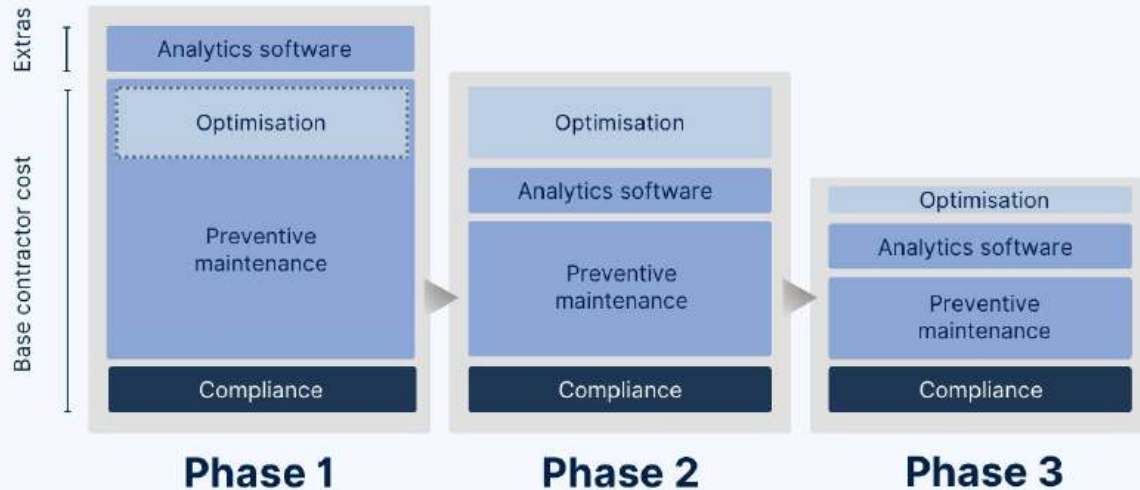
1. Initial integration
Introduction of analytics without maintenance contracts aligned.

2. Contract evolution
Analytics with realigned maintenance contracts to comply with the principles of data-driven maintenance.

3. Mastery and refinement
Ongoing regime after clearing R&M and optimisation backlog.