univers

Retail Industry

univers

Helping Retailers Achieve Net Zero

Green your retail business with AI and IoT, simplify decarbonization, enhance transparency, and optimize energy use across stores, warehouses, and supply chains, all within a single unified platform.

Turning Sustainability into Competitive Advantage for the Retail Industry

Achieve up to

15%

Energy savings across portfolio of sites.

- Optimize energy savings up to 30% using AI-powered cooling optimization
- Automate your asset management systems

Reduce up to

20%

CO2 Emissions.

- Carbon tax savings through proactive carbon management. ($25-100 per ton)
- Meet stringent compliance standards with reliable, audit-grade data for seamless reporting.

Observe up to

70%

Lower reporting and compliance cost.

- Eliminate manual reporting with real-time data collection
- Avoid legal penalties

Why the Retail Industry Chooses Univers

Faster ROI	Achieve quick returns with typical payback in less than 2 years with AI-driven efficiency and cost savings.
Portfolio-level Solution	Deploy across hundreds of sites while maintaining high accuracy.
Unified Platform	A vertically integrated solution for energy, carbon, HVAC, and asset management, replacing multiple disconnected systems.

A Complete Enterprise Sustainability Stack

EnOS™ Ark RM Application Layer

Measure energy, water, and waste from IT/IoT sources with detailed, user-configurable dashboards

- Energy & Sustainability Management
- AI-powered HVAC Monitoring & Optimization
- Ecosystem Solutions
- Asset Monitoring & Control

EnOS™ Cloud & Edge Platform Layer

EnOS™ uses industry-standard protocols, standards & model libraries to enable continuous device monitoring, alerts and notifications.

- Enables fast device onboarding with high data quality
- Composable & configurable building blocks (CBBs)
- End-to-end data lifecycle management for multi-source hyperscale scenarios

Resources & Assets Layer

EnOS™ is system (BMS) , vendor agnostic, and gathers customer data from multiple IT & IoT sources reliably.

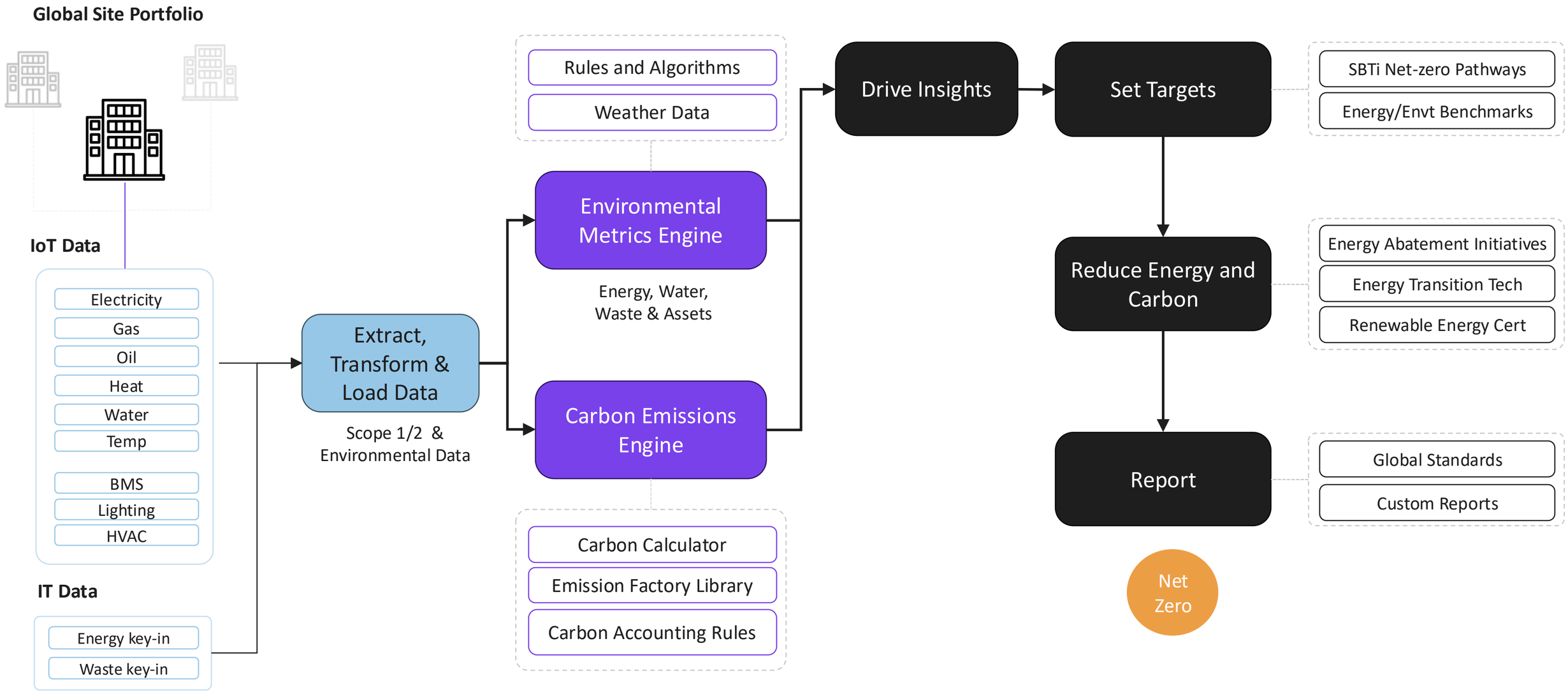
IoT sources

- Electricity
- Water
- Gas
- Oil
- Steam
- Heat
- Waste
- MV
- IAQ
- Chiller
- Pump
- CT
- AHU
- VAV
- FCU
- Lighting

IT

- Manual Key-In
- Bills

Seamless data capture, analytics & insights, and optimization across your portfolio



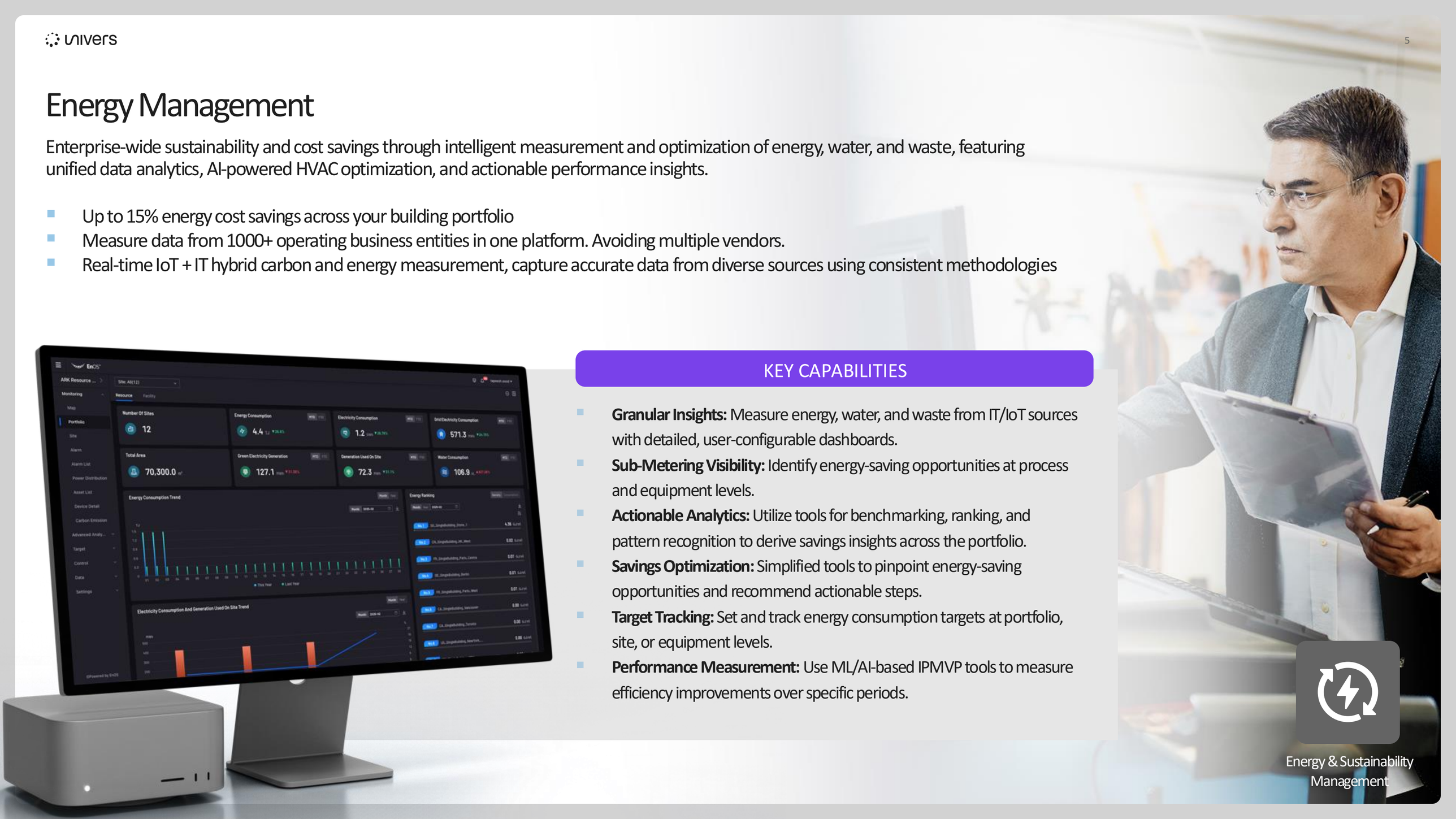
Energy Management

Enterprise-wide sustainability and cost savings through intelligent measurement and optimization of energy, water, and waste, featuring unified data analytics, AI-powered HVAC optimization, and actionable performance insights.

- Up to 15% energy cost savings across your building portfolio
- Measure data from 1000+ operating business entities in one platform. Avoiding multiple vendors.
- Real-time IoT + IT hybrid carbon and energy measurement, capture accurate data from diverse sources using consistent methodologies

KEY CAPABILITIES

- **Granular Insights:** Measure energy, water, and waste from IT/IoT sources with detailed, user-configurable dashboards.
- **Sub-Metering Visibility:** Identify energy-saving opportunities at process and equipment levels.
- **Actionable Analytics:** Utilize tools for benchmarking, ranking, and pattern recognition to derive savings insights across the portfolio.
- **Savings Optimization:** Simplified tools to pinpoint energy-saving opportunities and recommend actionable steps.
- **Target Tracking:** Set and track energy consumption targets at portfolio, site, or equipment levels.
- **Performance Measurement:** Use ML/AI-based IPMVP tools to measure efficiency improvements over specific periods.



Energy & Sustainability Management

Comprehensive Carbon Management and Insights for Reporting and Compliance

A comprehensive carbon management platform that automates real-time emissions tracking and reporting across your portfolio, featuring industry-standard calculations, audit-grade accuracy, and actionable sustainability insights through configurable dashboards.

- Reduce up to 20% CO2 Energy based Emissions .
- Observe up to 70% Lower reporting and compliance cost.
- Meet stringent regulatory compliance standards with reliable, audit-grade data for seamless reporting.

KEY CAPABILITIES

- **Carbon Tracking:** Real-time energy-based carbon emission accounting for scope 1 & 2 categories
- **Emission Standards:** Out-of-the box support for industry-standard Emission Factor libraries, Organizational boundary approach
- **Performance Visualization:** Configurable Portfolio & Site dashboards with sustainability KPIs
- **Compliance Reporting:** Ensure audit-grade accuracy and compliance with automated, real-time reporting and actionable insights

Energy & Sustainability Management

univers

Asset Monitoring and Operation for the Build-Environment

An integrated asset management platform that drives operational excellence through real-time monitoring and data-driven optimization, ensuring sustainable performance, enhanced efficiency, and maximized uptime across your infrastructure.

- Up to 15% savings in asset maintenance & operations
- Flexible asset control: Manual, auto-scheduled and conditional system functionality
- Out-of-the-box alarm settings & notifications that can be configured based on portfolio needs

KEY CAPABILITIES

- **BMS Health Monitoring:** Ensure higher availability and efficiency across building portfolios.
- **Optimized Control:** Enable manual, scheduled, or conditional control of BMS assets for energy savings.
- **Custom Alarms:** Configure standard and custom alarms for timely actions and issue resolution.

Asset Monitoring & Control

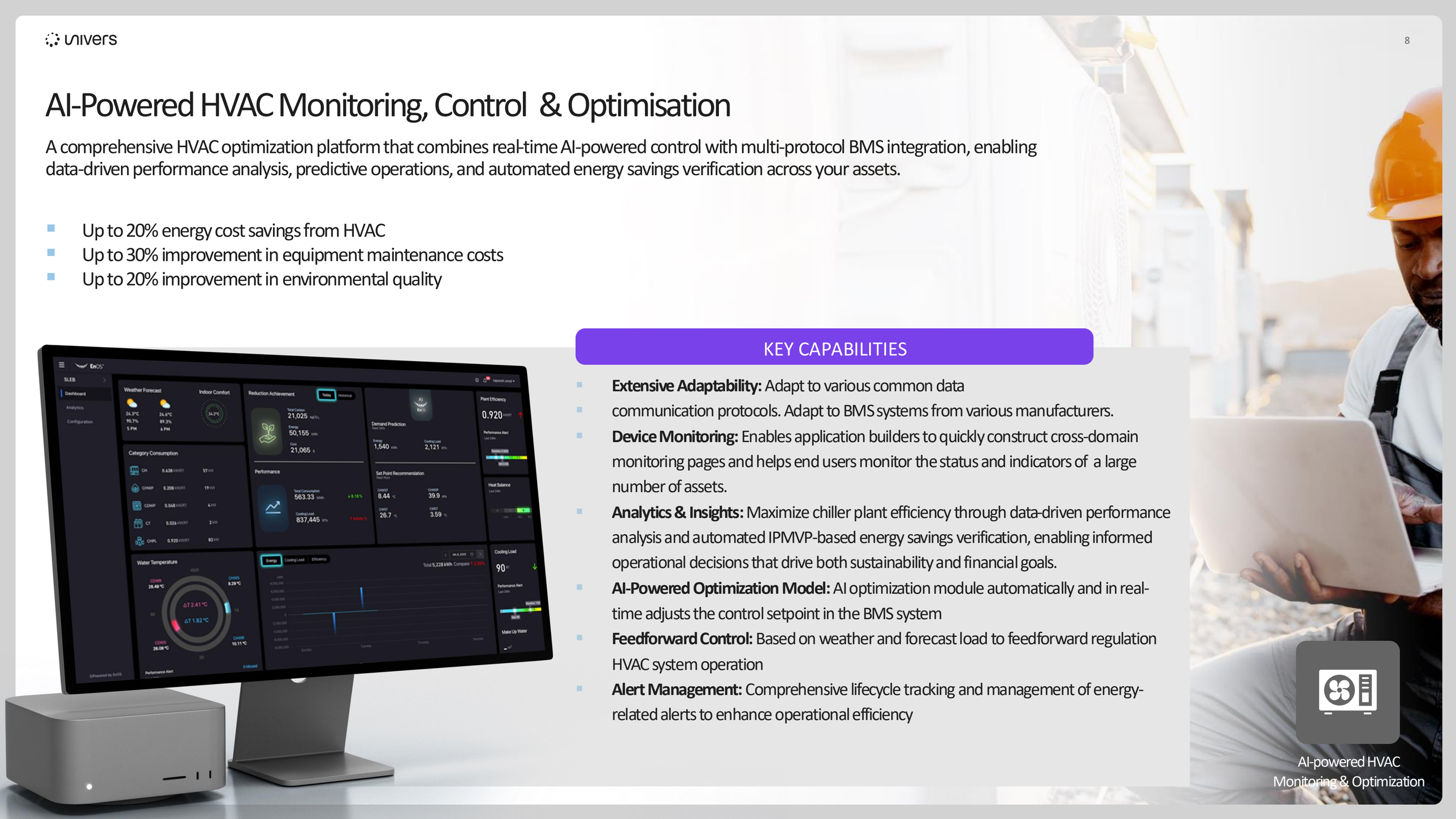
AI-Powered HVAC Monitoring, Control & Optimisation

A comprehensive HVAC optimization platform that combines real-time AI-powered control with multi-protocol BMS integration, enabling data-driven performance analysis, predictive operations, and automated energy savings verification across your assets.

- Up to 20% energy cost savings from HVAC
- Up to 30% improvement in equipment maintenance costs
- Up to 20% improvement in environmental quality

KEY CAPABILITIES

- **Extensive Adaptability:** Adapt to various common data
- communication protocols. Adapt to BMS systems from various manufacturers.
- **Device Monitoring:** Enables application builders to quickly construct cross-domain monitoring pages and helps end users monitor the status and indicators of a large number of assets.
- **Analytics & Insights:** Maximize chiller plant efficiency through data-driven performance analysis and automated IPMVP-based energy savings verification, enabling informed operational decisions that drive both sustainability and financial goals.
- **AI-Powered Optimization Model:** AI optimization module automatically and in real-time adjusts the control setpoint in the BMS system
- **Feedforward Control:** Based on weather and forecast load to feedforward regulation HVAC system operation
- **Alert Management:** Comprehensive lifecycle tracking and management of energy-related alerts to enhance operational efficiency



AI-powered HVAC Monitoring & Optimization

Ark Lift Monitoring & Maintenance

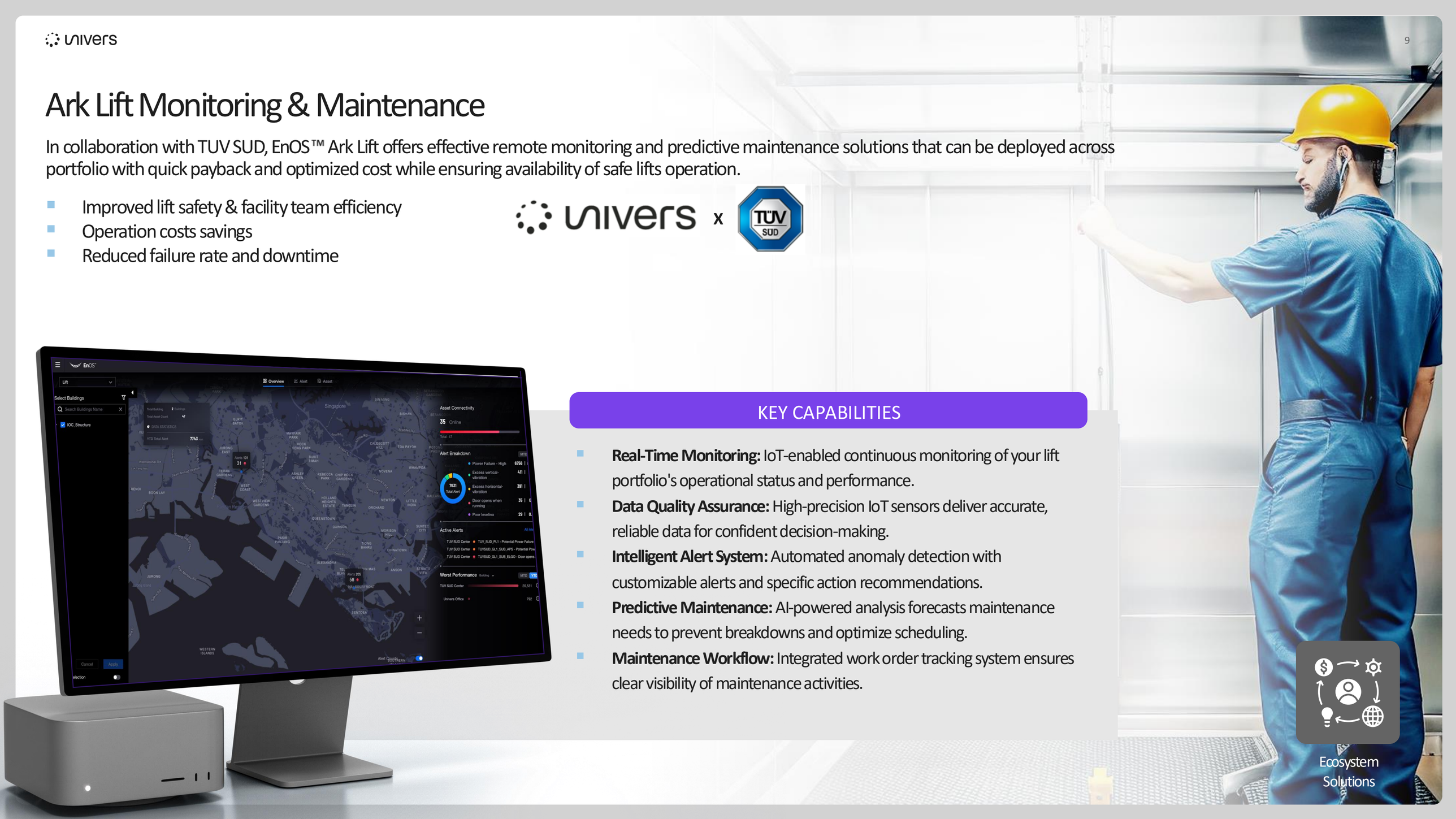
In collaboration with TUV SUD, EnOS™ Ark Lift offers effective remote monitoring and predictive maintenance solutions that can be deployed across portfolio with quick payback and optimized cost while ensuring availability of safe lifts operation.

- Improved lift safety & facility team efficiency
- Operation costs savings
- Reduced failure rate and downtime

univers x TÜV SÜD

KEY CAPABILITIES

- **Real-Time Monitoring:** IoT-enabled continuous monitoring of your lift portfolio's operational status and performance.
- **Data Quality Assurance:** High-precision IoT sensors deliver accurate, reliable data for confident decision-making.
- **Intelligent Alert System:** Automated anomaly detection with customizable alerts and specific action recommendations.
- **Predictive Maintenance:** AI-powered analysis forecasts maintenance needs to prevent breakdowns and optimize scheduling.
- **Maintenance Workflow:** Integrated work order tracking system ensures clear visibility of maintenance activities.



Ecosystem Solutions

Ark Energy & Cooling Solution

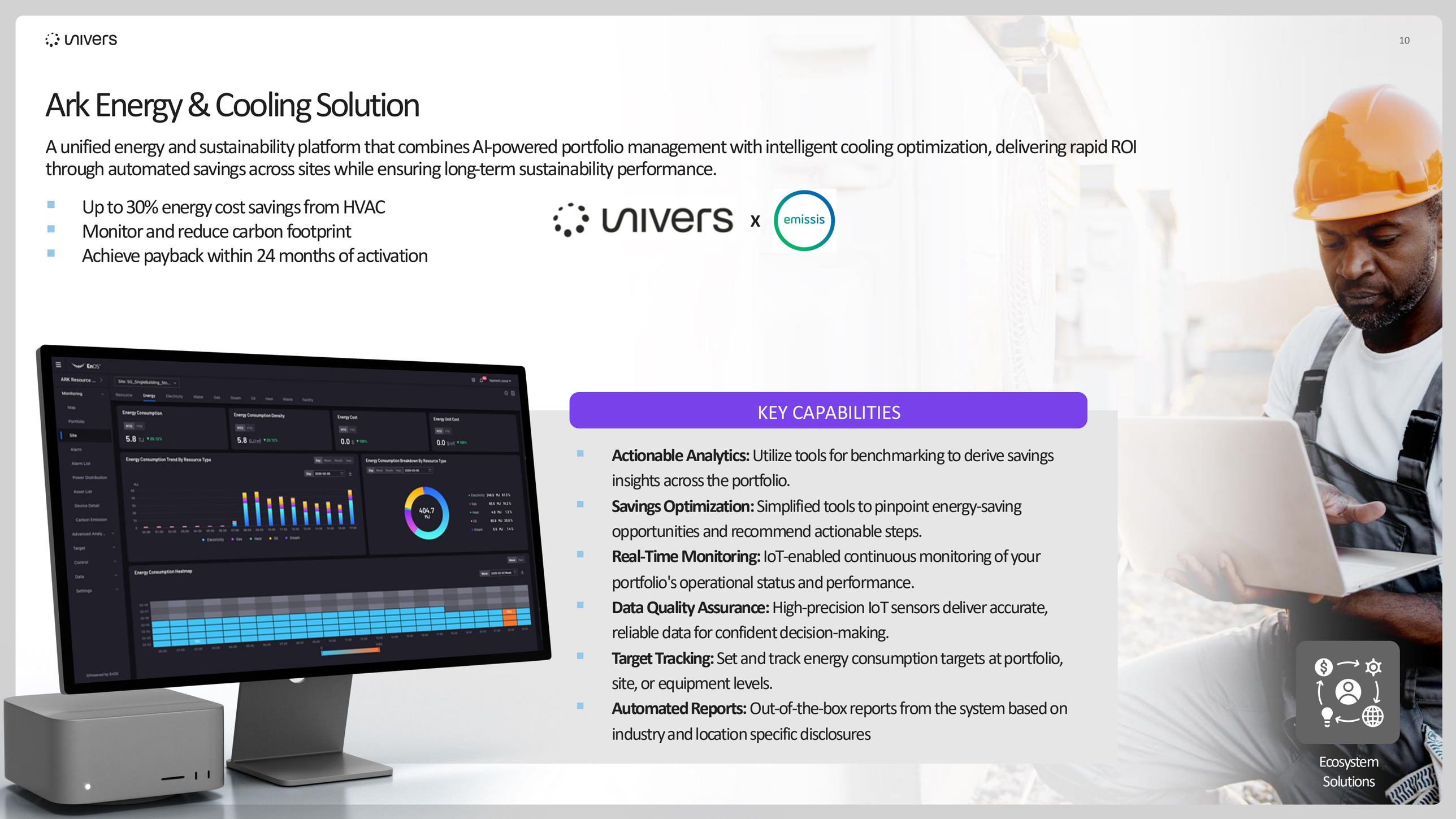
A unified energy and sustainability platform that combines AI-powered portfolio management with intelligent cooling optimization, delivering rapid ROI through automated savings across sites while ensuring long-term sustainability performance.

- Up to 30% energy cost savings from HVAC
- Monitor and reduce carbon footprint
- Achieve payback within 24 months of activation

univers x emissis

KEY CAPABILITIES

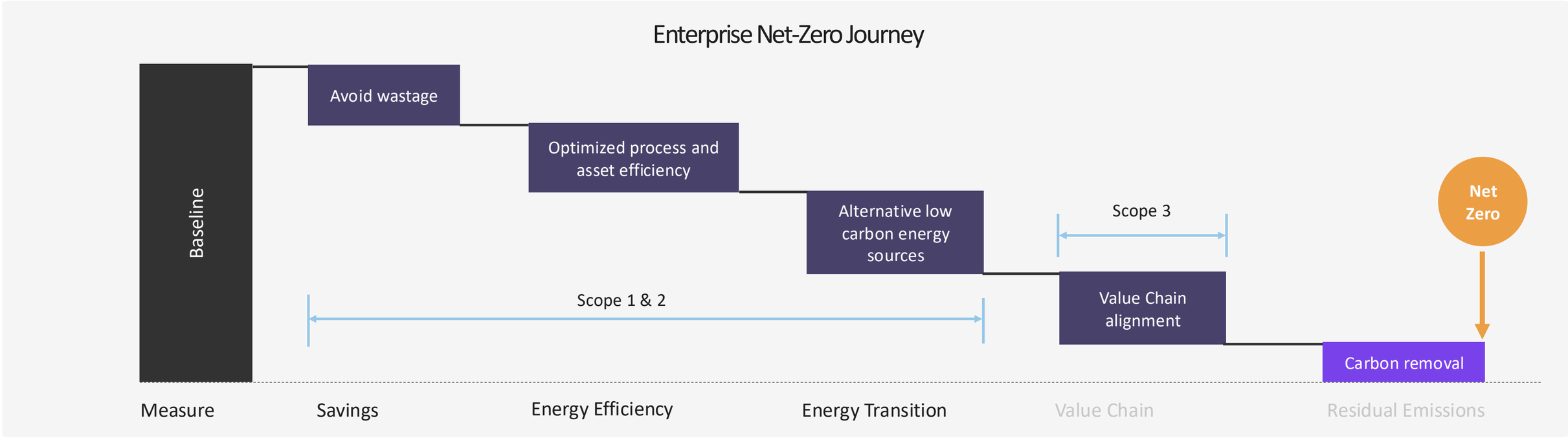
- **Actionable Analytics:** Utilize tools for benchmarking to derive savings insights across the portfolio.
- **Savings Optimization:** Simplified tools to pinpoint energy-saving opportunities and recommend actionable steps.
- **Real-Time Monitoring:** IoT-enabled continuous monitoring of your portfolio's operational status and performance.
- **Data Quality Assurance:** High-precision IoT sensors deliver accurate, reliable data for confident decision-making.
- **Target Tracking:** Set and track energy consumption targets at portfolio, site, or equipment levels.
- **Automated Reports:** Out-of-the-box reports from the system based on industry and location specific disclosures



Ecosystem Solutions

Enos™ Ark RM Helps To Manage The Key Levers Of Enterprise Net-zero Journey

EnOS ™ Ark helps enterprises throughout their Net-zero energy journey by increasing savings, improving energy efficiency and enabling a faster energy transition for their entire portfolio.



EnOS™ Ark Suite Capabilities

ARK RM	✓	✓	✓	✓		
AI HVAC		✓	✓			
Ecosystem Solutions		✓	✓			
Other EnOS™ Products					✓	✓

univers

CLIENT NAME

Starbucks

Case Study

ABOUT STARBUCKS

- **Leading Global Beverage Company**

  Starbucks is a global leader in the food and beverage industry, serving millions of customers worldwide with both dine-in and takeaway services.

- **Sustainability and Efficiency Goals**

  Starbucks aimed to improve operational efficiency by monitoring and controlling critical systems in its stores, while aligning with sustainability goals by optimizing energy and resource use.

KEY CHALLENGES

- **System Monitoring and Control**

  Needed to monitor and control electricity, water, indoor air quality, and VRV Air Conditioning across stores.

- **Complex Equipment Management**

  Managed over 20 types of equipment, 40% with remote control, requiring efficient system optimization.

- **Sustainability Goals**

  Sought to reduce energy, water, and gas usage while enhancing sustainability efforts.

OUR SOLUTION

Resource management

Fleet management of 1000+ stores for energy and resource management to build global transparency and baseline.

Fleet Control

Set store-closing mode. remotely turn off related equipment during non-essential usage time

Asset Monitoring

- Fleet management of 20+ types of assets to streamline operation
- Replace the water filter only when it's needed (based on data), increasing efficiency

Environment Comfort Monitoring

Tracked 15 air quality parameters, including CO2, humidity, and fresh air flow.

RESULTS

>10% Savings

Reduced electricity, gas, and water usage by over 10%.

100% Renewable Energy

Shifted operations to 100% renewable energy.

Improved Customer Experience

Enhanced air quality for a better in-store experience.

univers

CLIENT NAME

NIKE

Case Study

ABOUT NIKE

- **Leading Provider**

  One of the world's largest shoe and athletic apparel retailers, renowned for its global reach and commitment to sustainability.

- **GHG Emission Reduction Goals**

  The retailer set ambitious goals, including a 70% absolute reduction in GHG emissions in owned or operated facilities by transitioning to 100% renewable electricity and fleet electrification. Additionally, they aimed for a 65% reduction in Scope 1 & 2 emissions and a 30% reduction in Scope 3 emissions by 2030.

KEY CHALLENGES

- **Energy Efficiency**

  The retailer faced challenges in effectively managing energy consumption across its extensive network of retail stores.

- **Data Integration**

  Collecting and analyzing energy and HVAC data from multiple energy meters and building management systems (BMS) across numerous locations proved to be complex and resource-intensive.

- **Cost and Sustainability Pressure**

  Reliance on historical data modeling without predictive insights.

OUR SOLUTION

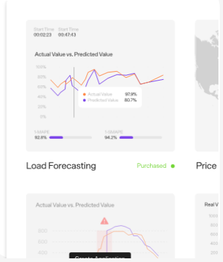
Edge Hardware + EnOS ™ Software

Multi-system Data Acquisition

Deployed to manage peak and load performance, collecting real-time energy and HVAC data from energy meters and BMS systems.

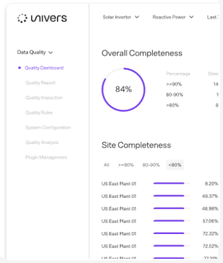
Resource Management

Displayed real-time energy data, tracked savings, and calculated ROI



HVAC Optimization

Data was centralized in a cloud database, integrated with Accenture's dashboard for analysis and reporting.



RESULTS

10-12% Energy Savings

Each connected retail store achieved an energy savings of 10-12%, optimizing energy use through smart monitoring and peak/load management.

100+ Stores Connected

Over 100 stores were equipped with 250 electricity meters, enabling comprehensive data collection and energy optimization.

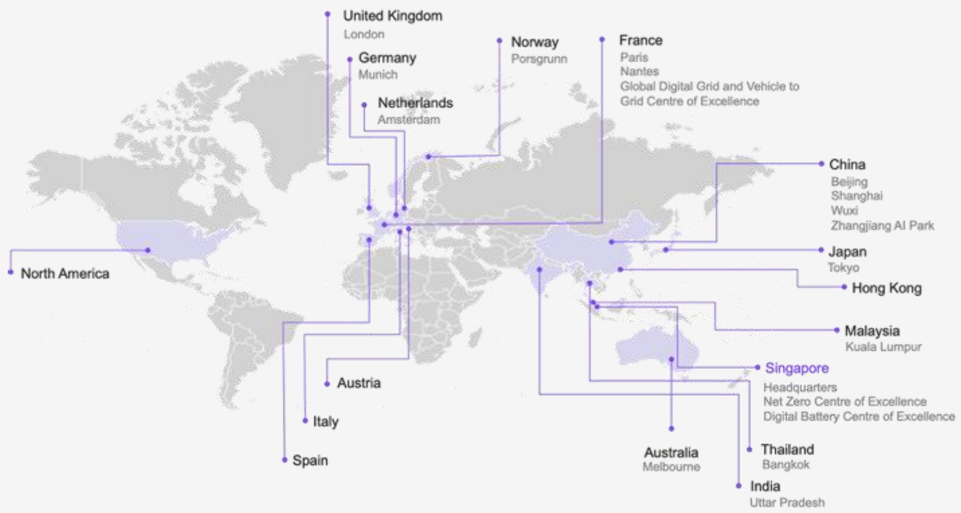
Compliance and Sustainability

The retailer met its sustainability goals with full compliance in data collection standards, contributing to its GHG emission reduction targets.

< 15 Months ROI

Delivered ROI in less than 15 months, driving immediate cost savings.

About Univers: Empowering Sustainable Transformation



1,200+
Customers

45
Countries

18%
2022 Fortune 50

10+
Industries Covered

30%
Leading energy & utilities companies

Retail

Manufacturing

Public Service

Real Estate & Facilities Management

Ports, Transport & Logistics

280M+
IoT Sensor Connected

788GW
Renewable Energy Managed

20+
Offices Globally

900+
Employees

75%
R&D Engineers

126
Patents

Certifications

Data & Security Compliance

Getting Started with Univers

1 Understand Your Baseline

Conduct a comprehensive energy audit to assess current, energy use, carbon footprint, and operational metrics, identifying inefficiencies and data gaps for a complete baseline.

2 Identify Areas to Get Started

Prioritize locations or processes with the highest energy use or potential for improvement, evaluate feasibility and develop an implementation roadmap for early success.

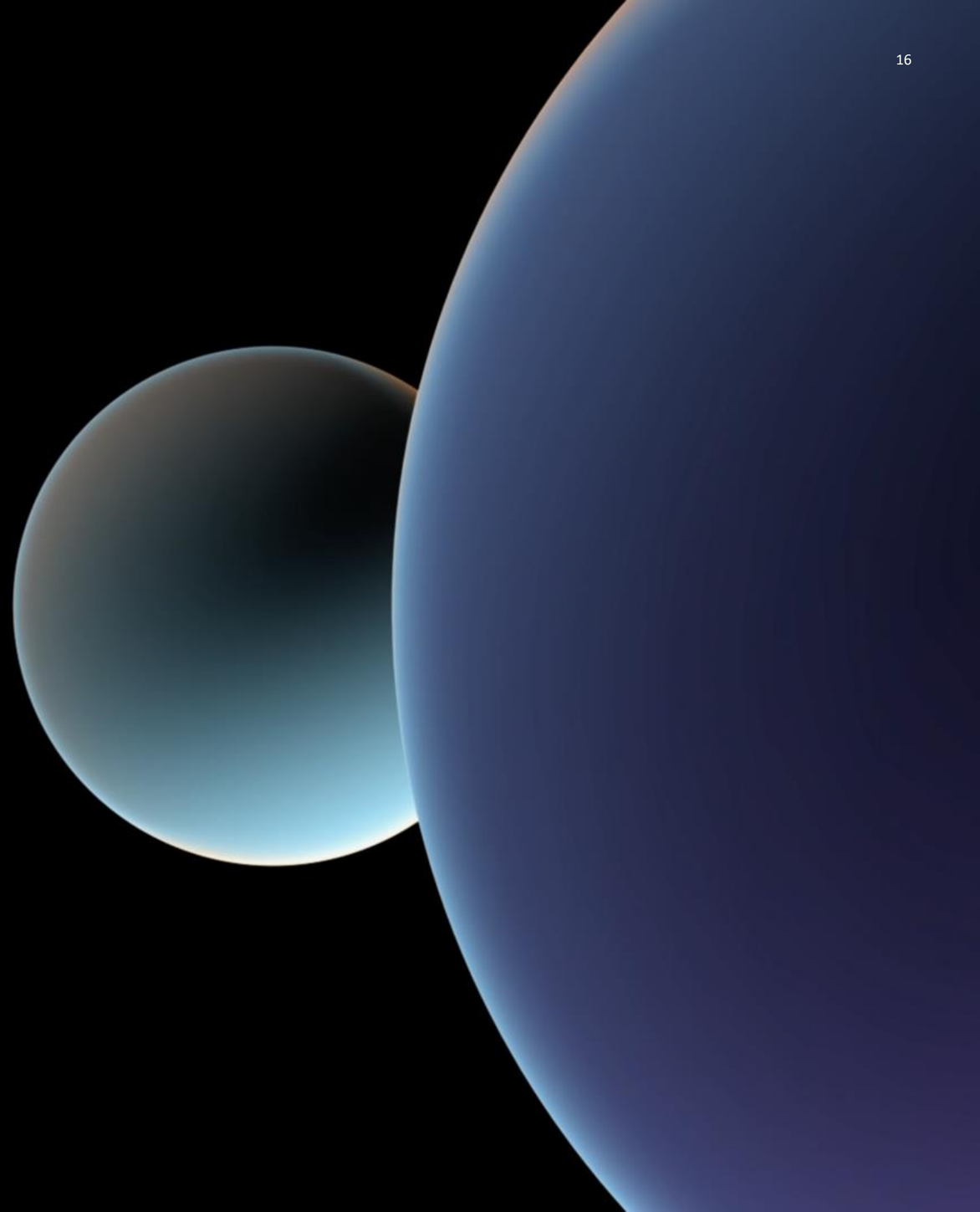
3 Trial Project – Monitor and Analyze

Deploy Univers in a pilot, monitor performance, and analyze results to validate solutions and identify other areas of opportunity.

4 Optimize and Scale

Apply insights to optimize operations and expand the Univers platform to additional locations or business units. Track performance and refine strategies for long-term success.

Thank you



To learn more about us, please visit

www.univers.com

https://www.linkedin.com/company/univers-intl/