247 ENERGY

The Intelligent Battery Park

Digital Twins and AI-Driven Asset Management for Large-Scale Energy Storage

*What every asset manager, infrastructure investor,
and technical operator needs to understand.*

James Troch
Chief Executive Officer
247 Energy NV

February 2026

FOREWORD

Why the Operations Gap Is the Next Frontier in Battery Storage

The battery storage industry has spent the past decade solving the wrong problem first. Capital has flowed, development pipelines have filled, and financing structures have matured, but the operational layer, the software intelligence that determines whether a commissioned asset performs to its potential or underperforms against its investment case, has received a fraction of the attention that has been devoted to procurement, construction, and financing. The consequence is that many battery storage assets are operating well below their theoretical capability, not because the hardware is flawed but because the intelligence governing their operation is generic, reactive, and disconnected from the real-time dynamics of the assets it manages.

Digital twins and artificial intelligence-driven asset management represent the operational frontier of the battery storage industry. They are the tools that convert a well-financed, well-constructed battery park into a genuinely high-performing one, producing the returns that investment models assumed at underwriting but that operational reality does not always deliver. I have made in-house software development a core organisational capability at 247 Energy for precisely this reason: operations is where long-term value is created or destroyed, and the software layer is where operational excellence is expressed or forfeited.

This paper explains the principles, the architecture, and the practical implications of digital twin and AI-driven asset management for battery storage infrastructure. It is written for asset managers, infrastructure fund investors, and technical operators who want to understand not just what this technology does but why it matters to the financial performance and residual value of their storage investments. The operational gap in battery storage is not a permanent condition; it is a problem with a solution, and the solution is increasingly well-defined.

James Troch,

Chief Executive Officer,

247 Energy

THE ASSET MANAGEMENT IMPERATIVE

Complexity at Scale

Why Battery Storage Demands a New Kind of Intelligence

A utility-scale battery storage park is not a simple asset. A single project at the lower end of the commercial scale comprises hundreds of individual battery modules, tens of string inverters, a collection of power conversion systems, a battery management system governing the behaviour of thousands of individual cells, a grid connection interface with its associated protection and metering systems, and an energy management system that coordinates all of these elements in response to market signals and grid conditions. At larger scales, these numbers multiply accordingly. Managing this complexity reliably, cost-effectively, and in a way that maximises the revenue-generating potential of the asset over its full operating life is a formidable operational challenge.

The challenge is compounded by the dynamic nature of battery storage operations. Unlike a gas turbine or a hydroelectric plant, a battery storage system does not operate in a small number of well-defined modes at fixed power levels. It operates across a continuous range of charge and discharge rates, state-of-charge levels, temperatures, and cycle depths, and the combination of these variables at any given moment determines the degradation rate of the cells, the efficiency of the energy conversion, and the ability of the system to respond to grid instructions within the required time windows. Optimising across all of these variables simultaneously, in real time, is beyond the capability of static dispatch rules or manual operator intervention.

The financial consequences of suboptimal battery storage operations are material and compound over time. A system that is dispatched without intelligence, responding to price signals in a way that maximises short-term revenue without accounting for the degradation impact of the dispatch profile, will reach its capacity fade thresholds earlier than a system that is managed with awareness of the relationship between dispatch behaviour and cell longevity. The difference in lifetime energy throughput between an intelligently managed system and a naively dispatched one can amount to a significant fraction of total lifetime revenue, representing a real and avoidable reduction in the return on the original capital investment.

> ***Battery storage that is managed without intelligence is not just underperforming; it is consuming its own future, trading long-term capacity for short-term dispatch revenue in a trade that is rarely tracked and almost never intentional.***

Asset managers overseeing battery storage portfolios face the additional challenge of scale. A portfolio of multiple storage assets, potentially across different sites, different technologies, different connection agreements, and different market participation structures, cannot be managed effectively by a team that relies on manual monitoring and reactive maintenance. The information flows generated by a single battery storage park, including cell-level telemetry, inverter performance data, grid metering, and market position data, exceed what any human operator can process in real time. Intelligent software tools that can synthesise these information flows, identify anomalies, forecast performance, and generate prioritised intervention recommendations are not a luxury in a multi-asset portfolio; they are a necessity.

The solution to the asset management challenge in battery storage is not more operators or more manual reporting. It is a purpose-built digital intelligence layer that can monitor, model, predict, and optimise the operation of storage assets continuously and at a level of granularity that no human team can replicate. Digital twin technology and artificial intelligence provide the foundations of this intelligence layer, and the organisations that have built or acquired these capabilities are beginning to show operational performance advantages that translate directly into superior financial returns over the asset's lifetime.

DIGITAL TWINS IN ENERGY STORAGE

Principles, Architecture, and Operational Value

What a Digital Twin Actually Is

A digital twin is a dynamic, continuously updated software model of a physical asset that receives real-time data from the asset and uses that data to maintain an accurate representation of the asset's current state, history, and projected future behaviour. In the context of battery energy storage, a digital twin encompasses models of individual cells, modules, strings, inverters, and the overall system, each updated from sensor data at a frequency that reflects the timescales on which the relevant physical processes operate. The twin is not a static simulation run periodically for planning purposes; it is a live representation of the asset that evolves in lockstep with the physical system it models.

The architecture of a battery storage digital twin typically comprises several interconnected layers. The data acquisition layer collects sensor readings from the battery management system, the inverter controllers, the thermal management system, and the grid metering infrastructure. The state estimation layer uses this raw sensor data to compute derived quantities that are not directly measured, such as the internal temperature distribution of individual cells, the instantaneous impedance of battery strings, or the effective capacity available at different discharge rates. The model layer uses the state estimates to project forward the behaviour of the asset under different operating scenarios, enabling both short-term dispatch optimisation and long-term degradation planning.

The value of a digital twin for battery storage operations derives from the gap between what sensors directly measure and what operators actually need to know in order to manage the asset effectively. A sensor network, however dense, can measure voltage, current, and surface temperature at discrete points. What operators need to know is the internal electrochemical state of thousands of cells, the degradation trajectory of individual battery modules, the remaining capacity available for market participation, and the probability of fault events in the near future. The digital twin bridges this gap, converting raw sensor data into the actionable information that operators need to make decisions that maximise asset performance and longevity.

The operational value of a well-implemented digital twin for a battery storage asset is expressed across several dimensions simultaneously. In real-time operations, the twin enables state-aware dispatch that considers the current health and remaining capacity of every component when calculating the optimal response to a market signal or grid instruction. In maintenance planning, the twin enables the identification of components approaching end-of-life or fault conditions before they fail, supporting planned interventions that minimise downtime and avoid the higher costs and revenue losses associated with unplanned failures. In investment planning, the twin provides the data foundation for accurate long-term performance forecasting that supports refinancing decisions, asset sale valuations, and life extension assessments.

The maturity of digital twin implementations in the battery storage sector varies considerably. At the basic level, some developers use the term to describe historical data logging with dashboard visualisation, which provides retrospective visibility but little predictive capability. At the advanced level, digital twin implementations incorporate physics-based electrochemical models, machine learning algorithms trained on the asset's specific operating history, and closed-loop optimisation that feeds model outputs directly back into the dispatch system. The gap in operational performance between these levels of implementation is substantial, and the investment required to move from basic to advanced capability is one of the most important factors in the long-term competitiveness of a battery storage operator.

PREDICTIVE MAINTENANCE

From Reactive Repair to Proactive Asset Care

The Financial Consequences of the Choice

Maintenance of a battery storage asset can be organised along a spectrum from purely reactive, where interventions occur only after a fault has manifested and caused a failure or availability loss, to fully predictive, where interventions are planned and executed before any failure occurs, based on the forecasted state of the component and its probability of fault within a defined future window. The financial consequences of the choice between these approaches are substantial, because the cost of a planned maintenance intervention is typically a small fraction of the combined cost of an unplanned failure, its associated revenue loss during downtime, and any secondary damage to connected components.

Battery storage assets present specific failure modes that are amenable to predictive detection if the right monitoring and modelling capabilities are in place. Cell-level capacity fade that exceeds the expected degradation trajectory for the given operating profile can indicate manufacturing defects, thermal management issues, or electrolyte decomposition that will accelerate to complete cell failure if not addressed. Impedance growth in individual cells or strings, which can be detected through analysis of voltage and current signatures during normal operation, is an early indicator of lithium plating or separator deterioration that precedes capacity fade. Thermal anomalies in the battery enclosure, even those that are subtle relative to normal operating temperature ranges, can signal early-stage thermal runaway precursors that require immediate investigation.

The detection of these failure precursors requires a monitoring architecture that goes beyond the standard battery management system fault detection algorithms, which are designed primarily to prevent immediate safety events rather than to provide early warning of gradual degradation processes. A predictive maintenance system for battery storage must continuously analyse the statistical distribution of cell-level performance metrics across the entire population of cells in the asset, identify cells or groups of cells that are diverging from the expected performance envelope, and evaluate whether the observed divergence is consistent with a known degradation pathway that has a predictable endpoint.

> ***The difference between reactive and predictive maintenance in battery storage is not a matter of operational philosophy; it is a matter of asset life, revenue availability, and the ultimate return on a capital-intensive investment.***

Inverter and power conversion system maintenance presents a complementary predictive opportunity. Power electronics are subject to degradation mechanisms including capacitor ageing, semiconductor junction fatigue, and connection point corrosion that can be detected through analysis of waveform quality metrics, thermal imaging during operation, and comparison of actual efficiency curves against manufacturer specifications. A digital twin that models the expected performance of each inverter based on its operating history and environmental exposure can identify units that are degrading faster than their peers, enabling targeted maintenance that prevents availability losses during periods of high market revenue.

The economic case for investing in predictive maintenance capability is compelling when quantified against the alternative. The revenue loss from a battery storage asset that is unavailable during a period of high electricity prices or contracted service delivery can be substantial, and the cost of emergency maintenance, including expedited spare parts procurement and out-of-hours engineering labour, is typically several multiples of the cost of equivalent planned work. Asset managers with institutional obligations to maximise returns from their storage portfolios will increasingly require demonstration of predictive maintenance capability as a condition of investment, recognising that the operational performance of the asset is as important as the initial capital cost in determining the lifetime return.

STATE, HEALTH, AND DEGRADATION

The Three Quantities That Govern Asset Value

What Must Be Known to Manage an Asset Well

The three fundamental quantities that govern the operational capability and long-term value of a battery storage asset are state-of-charge, state-of-health, and the rate of degradation as a function of operating conditions. Each of these quantities is non-trivial to measure accurately, each evolves on a different timescale, and each has a direct bearing on the decisions that must be made in real-time dispatch, in maintenance planning, and in long-term investment management. Accurate, continuously updated estimates of all three are the foundation of intelligent battery storage operations.

State-of-charge, the percentage of the battery's available capacity that is currently stored as electrical energy, is the most immediately relevant quantity for dispatch operations. An accurate state-of-charge estimate is required to determine how much energy can be discharged at a given power level before reaching the minimum safe operating limit, and how much charging capacity is available before the maximum limit is reached. Inaccurate state-of-charge estimation leads to either under-utilisation of the available capacity, leaving revenue on the table, or over-stressing of the cells through excursions beyond safe operating limits, which accelerates degradation. State-of-charge estimation algorithms must account for the temperature dependence of cell behaviour, the history of recent charge and discharge cycles, and the ageing state of the cells.

State-of-health, the ratio of the battery's current maximum capacity to its original rated capacity, is the primary indicator of the asset's long-term value and its ability to meet contracted performance obligations. State-of-health is typically measured through periodic capacity tests under controlled conditions, but modern digital twin implementations can estimate state-of-health continuously from the analysis of incremental capacity curves and differential voltage signatures that are derived from normal operating data. Continuous state-of-health monitoring enables early detection of accelerated degradation before it becomes visible in conventional capacity tests, providing months of advance warning in which the degradation cause can be diagnosed and addressed.

Degradation modelling, the quantitative prediction of how state-of-health will evolve as a function of future operating conditions, is the most technically demanding element of battery storage asset management and the one with the greatest financial implications. A degradation model that accurately predicts the relationship between dispatch behaviour, temperature exposure, and capacity fade enables the dispatch optimisation system to make trade-offs between short-term revenue and long-term capacity that are grounded in the actual physics of the asset rather than in conservative blanket restrictions. The difference between an empirical degradation model calibrated to the specific chemistry and operating history of the asset and a generic degradation curve from published literature can amount to significant differences in lifetime energy throughput and therefore in lifetime revenue.

The integration of state-of-charge, state-of-health, and degradation models within a unified digital twin creates a self-improving system: as the asset accumulates operating history, the models are continuously re-calibrated against observed performance, improving their accuracy and reducing the uncertainty bands around their forecasts. This improvement in forecast accuracy has compound benefits for dispatch optimisation, maintenance planning, and investor reporting. Asset managers who can demonstrate that their performance forecasts are based on continuously updated, asset-specific models rather than generic assumptions will find that this capability differentiates their reporting quality and credibility in ways that matter to institutional investors.

MONITORING, DISPATCH, AND CONTROL

The Operational Technology Layer

Requirements in Tension, Solutions in Architecture

The operational control architecture of a modern battery storage park must satisfy requirements that are in tension with each other. It must be highly responsive, executing grid instructions and market transactions within the millisecond-to-second window required for frequency response and arbitrage services. It must be highly reliable, maintaining communication with grid operators and market systems even when individual components fail or communication links are degraded. It must be highly secure, preventing unauthorised access to control systems that could disrupt grid services or compromise physical safety. And it must be transparent and auditable, providing regulators, investors, and operators with the data needed to verify performance and investigate anomalies.

Remote monitoring is the foundation of operational control for distributed battery storage assets. A well-designed remote monitoring architecture collects data from every instrumented component in the asset at the highest available frequency, aggregates and processes that data in a secure operational technology environment, and presents actionable information to operators through interfaces that prioritise clarity and decision support over raw data volume. The most common failure mode in remote monitoring architectures is not insufficient data collection but insufficient data processing: systems that generate enormous volumes of raw telemetry but lack the analytical tools to convert that telemetry into the operational insights that enable effective decision-making.

Autonomous dispatch, the ability of the energy management system to execute market transactions and manage the battery’s charge and discharge profile without continuous human intervention, is essential for battery storage assets participating in markets that require rapid and continuous response. Frequency response markets, in particular, require the asset to adjust its output within seconds of detecting a frequency deviation, and the most valuable periods in energy arbitrage markets are often short-lived price spikes that require immediate execution to capture. An energy management system that requires operator approval for each dispatch decision cannot participate effectively in these markets. Autonomous dispatch is not a convenience; it is a prerequisite for full market participation.

The control architecture must be designed with cybersecurity as a foundational requirement rather than an afterthought. Battery storage assets are connected to grid control systems, energy markets, and remote monitoring platforms through multiple communication interfaces, each of which represents a potential attack surface. The consequences of a successful cyberattack on a battery storage control system range from revenue loss through disrupted market participation to physical safety risks if the attack results in abnormal operating conditions within the battery enclosure. A dedicated hardware firewall that provides a physical boundary between the battery management system and external communication interfaces is an important element of a defence-in-depth security architecture.

The integration of the autonomous dispatch system with the digital twin creates the most powerful operational configuration available to battery storage operators. The digital twin provides the dispatch system with a continuously updated model of the asset's available capacity, degradation state, and optimal operating envelope. The dispatch system uses this model to execute market participation decisions that maximise revenue while respecting the constraints imposed by the asset's current state. The outcomes of these decisions are fed back into the digital twin, updating the model and improving its predictive accuracy. This closed-loop architecture transforms the battery storage asset from a passive responder to market signals into an active participant in its own optimisation.

DATA GOVERNANCE AND CYBERSECURITY

The Hidden Foundation of Operational Value

Ownership, Compliance, and Secondary Market Implications

The digital intelligence layer that enables advanced asset management for battery storage generates and processes vast quantities of operational data. The governance of this data, including its ownership, access rights, storage, retention, and use in third-party analysis, is a dimension of asset management that receives insufficient attention in most project development processes but that has significant implications for operational performance, regulatory compliance, and the value of the asset in secondary market transactions.

Data ownership is the foundational question in battery storage data governance. The telemetry generated by a battery storage asset is typically collected by the battery management system of the hardware vendor, the inverter monitoring systems of the power conversion equipment manufacturers, the energy management software of the operational technology vendor, and the grid metering systems of the network operator. Each of these parties may assert rights over the data they collect, and the contractual arrangements governing data access and ownership may not have been carefully considered during the project development phase. Asset owners who do not have clear, contractually secured rights to the full operational data set of their asset are in a significantly weaker position when seeking to develop advanced analytics, change technology vendors, or present performance data to potential buyers.

The integration of data from multiple operational technology systems into a unified analytics and digital twin platform is a significant engineering challenge. Battery management systems, inverter monitoring systems, energy management systems, and grid metering systems typically use different communication protocols, different data formats, and different sampling frequencies. Building a data integration architecture that can reliably collect, normalise, and process data from all of these sources requires both technical capability and sustained engineering investment. The value of this integration is proportional to the completeness and quality of the data it produces, and gaps or inconsistencies in the data pipeline degrade the accuracy of every model that depends on it.

Regulatory compliance in data management for battery storage assets encompasses several dimensions: the requirements of grid operators regarding the retention and availability of performance data for market settlement and dispute resolution, the requirements of environmental and energy regulators regarding the documentation of renewable energy generation and storage, and, where the asset is operated on behalf of or co-owned with external investors, the reporting obligations that govern the provision of performance information to those investors. Each of these compliance requirements should be designed into the data management architecture from the outset rather than accommodated through manual workarounds after the asset is commissioned.

The long-term value of a battery storage asset in secondary market transactions is increasingly influenced by the quality and completeness of its operational data record. A prospective buyer who can access a comprehensive, auditable record of the asset’s operational history, performance against contracted obligations, degradation trajectory, and maintenance interventions is in a position to value the asset with greater confidence than one who must rely on limited data or self-reported summaries. The investment in data governance and operational transparency that an asset owner makes during the operating phase is therefore an investment in the liquidity and value of the asset at the point of any future transaction.

THE INVESTMENT CASE

How Digital Intelligence Multiplies Asset Returns

Revenue, Cost, and Life Extension Compounded

The financial case for investing in digital twin and AI-driven asset management capability for battery storage infrastructure is grounded in the quantifiable impact on three categories of financial performance: revenue maximisation, cost reduction, and asset life extension. Each of these categories contributes to the improvement in total return over the asset's operating life relative to the baseline of less sophisticated operational management, and the combined impact is material relative to the incremental cost of the digital intelligence investment.

Revenue maximisation through AI-driven dispatch optimisation operates on two levels. The first is short-term dispatch efficiency: ensuring that the battery's available capacity is used to capture the highest-value market opportunities at each moment, accounting for the constraints imposed by the asset's current state-of-charge, state-of-health, and contracted service obligations. The second is long-term dispatch strategy: managing the degradation impact of the cumulative dispatch profile to preserve capacity for future high-value periods rather than consuming lifetime throughput on lower-value opportunities. The difference in lifetime revenue between an intelligently dispatched asset and a naively dispatched one is difficult to quantify in the abstract because it depends on market conditions, but the directional case is well-supported by operational experience across the industry.

Cost reduction through predictive maintenance has a well-understood financial structure. The avoidance of unplanned failures eliminates the revenue loss associated with unplanned downtime, which for a battery storage asset participating in contracted frequency response markets can be both the lost market revenue and potential contractual penalties for non-delivery. Planned maintenance interventions, executed when telemetry and digital twin modelling indicate that a component is approaching the end of its reliable service life, cost a fraction of emergency maintenance in labour, parts procurement, and downtime duration. The aggregate maintenance cost saving from predictive versus reactive maintenance over a ten-year asset life is significant and, combined with the revenue protection benefit, provides a strong financial case for the monitoring and analytics investment required.

> ***Digital intelligence in battery storage is not an operating cost; it is an investment that generates returns across the full life of the asset, compounding with each year of improved dispatch, avoided failures, and extended operational life.***

Asset life extension is the third financial lever and, over a long investment horizon, potentially the most valuable. Battery storage assets have a significant residual value after their initial warranty period, provided that degradation has been managed to preserve a meaningful proportion of original capacity. A digital twin-managed asset that has been dispatched with awareness of the degradation impact of each cycle, that has received timely predictive maintenance interventions to address accelerating degradation in individual modules, and that has been operated within the thermal envelope that maximises cell longevity will exhibit a more favourable degradation trajectory than an asset managed without these capabilities. The extension of usable asset life by even a small fraction of the total design life represents a significant addition to total lifetime revenue.

For infrastructure fund investors evaluating battery storage as an asset class, the operational capability of the management team and the sophistication of the technology stack are increasingly central to investment decisions. Funds that have been through a full operating cycle with battery storage assets have seen firsthand the performance dispersion between assets managed with sophisticated digital tools and those managed with basic monitoring and reactive maintenance. This experience is driving a shift in due diligence practice towards deeper scrutiny of operational technology capabilities, and developers who can demonstrate advanced digital twin and AI-driven management capability are attracting stronger investor interest and more favourable financing terms than those who cannot.

THE INTELLIGENCE RACE

Why First Movers Gain Lasting Advantage

Data, Models, and Organisational Capability

The competitive dynamics of AI-driven asset management in battery storage have characteristics that favour first movers disproportionately. Machine learning systems improve as they are exposed to more data, and the data that matters most for battery storage optimisation is operating history from the specific chemistry, configuration, and market environment of the assets being managed. An operator who began collecting high-quality operational data from battery storage assets three years ago has a training dataset advantage over a competitor who is only beginning to implement intelligent monitoring today, and that advantage compounds with each additional year of data and model calibration.

The development of effective digital twin models for battery storage requires a combination of electrochemical physics expertise, data engineering capability, and machine learning development skills that is not widely available in the energy industry. Organisations that have assembled these capabilities internally, rather than depending on generic third-party software solutions, are accumulating a team capability that is difficult and slow to replicate. The best engineers in this domain have options across the technology sector, and attracting and retaining them requires demonstrating a credible technical vision and meaningful technical challenges. Asset operators who have built genuine internal capability in digital twin and AI-driven management are therefore building an organisational asset as well as a technical one.

The regulatory environment is also evolving in ways that may create formal requirements for digital twin capability in battery storage operations. Grid codes in several markets are beginning to require detailed performance monitoring and reporting from battery storage assets that participate in ancillary service markets, and the documentation requirements for these markets are becoming more demanding as regulators seek to verify that contracted performance is being delivered. Operators who have invested in comprehensive monitoring and digital twin infrastructure will meet these requirements with minimal additional effort, while those who have relied on basic monitoring may face significant retrofitting costs to achieve compliance.

Secondary market dynamics in battery storage are also beginning to reflect the value of operational intelligence. Early transactions in which battery storage assets have been sold between investors have highlighted the difficulty of valuing assets whose operational history is poorly documented and whose future performance is uncertain because degradation has not been systematically tracked. As the secondary market matures, buyers will pay a premium for assets with well-documented operational histories and validated degradation models, because these assets can be valued with greater confidence and managed with lower operational risk after acquisition. Sellers who have invested in digital twin capability are therefore building value that is realised not only in operational performance but in transaction liquidity and pricing.

The conclusion for battery storage developers, operators, and investors is clear: the competitive advantage in this industry is moving from the ability to develop and finance assets to the ability to operate them with intelligence. The organisations that recognise this shift early and invest in building genuine digital twin and AI-driven management capability, rather than treating it as a future upgrade, are positioning themselves to outperform across every dimension of financial return: higher revenue, lower cost, longer asset life, and stronger secondary market value. The intelligence race has already begun; the question is not whether to enter it but how quickly.

Digital Twin and AI-Driven Asset Management

247 Energy NV has built in-house software development as a core organisational capability from its earliest days, precisely because the company's founders recognised that operational intelligence is where the long-term value of battery storage assets is created or destroyed. The battery management system, energy management system, and performance monitoring platform that 247 Energy deploys across its project portfolio are developed and maintained internally, giving the company full visibility into the control logic at every level and enabling continuous optimisation based on the company's own operating experience rather than on generic vendor solutions.

The 247 Energy digital monitoring architecture captures cell-level telemetry from every battery module in its operating assets, processes this data in real time against physics-based degradation models, and generates the predictive maintenance recommendations and dispatch optimisation parameters that govern the day-to-day operation of each asset. This architecture is not a prototype or a future development roadmap; it is in active operation across the company's commissioned projects and is continuously improved as the company accumulates operating experience and refines its models based on observed behaviour.

For infrastructure fund investors considering battery storage as an asset class, 247 Energy offers an operational model in which digital intelligence is not an add-on but the foundation of asset management. The company's co-investment approach, in which 247 Energy retains a stake in each asset alongside its capital partners, means that the financial incentives of the operator and the investor are fully aligned: 247 Energy benefits directly from every improvement in dispatch optimisation, every avoided failure, and every extension of asset life that its digital twin and AI-driven management systems deliver. This alignment of interest is, in the company's view, the most important structural feature of a high-performing battery storage investment.

With 505 megawatts of battery storage capacity across Belgium and surrounding markets, 247 Energy has the operational scale to develop and refine digital twin models that capture the specific performance characteristics of its project portfolio and the specific market dynamics of the markets in which it operates. The company welcomes discussions with asset managers, infrastructure investors, and technology partners who share the conviction that operational intelligence is the defining competitive advantage in the next generation of battery storage development. Enquiries regarding co-investment opportunities, technical partnerships, or the company’s operational technology platform are warmly invited.

247 Energy NV | Schaarbeekstraat 20E/11 | 9120 Beveren, Belgium

+32 3331 0000 | storage@247.energy | 247.energy