

# **GRIDBEATS™** **ENERGY EFFICIENCY** **SOLUTION SERVICES**

Empowering Industries to  
Decarbonize and Thrive

GridBeats™ Energy Efficiency Solution Services help industries decarbonize their operations, reduce costs, and achieve sustainable energy management through tailored solutions and expert guidance.



GE VERNOVA

# **“ENERGY EFFICIENCY AND DECARBONIZATION ARE TOO COMPLEX FOR TODAY’S INDUSTRIES ”**

**Many of our customers tell us that managing energy efficiency and decarbonization initiatives are too complex and time consuming.**

Rising energy costs, evolving regulations, emerging technologies, and increasing data requirements make it difficult for organizations to know where to start and how to prioritize actions. Without a structured approach, efforts can become fragmented, consume valuable internal resources, and deliver limited results. That is why a clear methodology, expert support, and a long-term energy management strategy are essential to turn complexity into measurable performance improvements.

GridBeats™ Energy Efficiency Solution Services are designed to simplify this journey and support organizations at every stage, from initial assessment to sustained performance improvement.



# WHY CHOOSE GE VERNOVA?

GE Vernova is a purpose-built company driving electrification and decarbonization. We help customers create a more sustainable world by delivering products and services that generate, transfer, orchestrate, convert, and store electricity.



**PROVEN  
CUSTOMER  
RESULTS:**

**16%**

**SAVED ON ENERGY BILLS**

## A Global Network of Energy and Performance Specialists

Our services are supported by a pool of certified energy managers with wide industrial experience, subject matter experts with deep knowledge on industrial assets and technology experts who can apply the latest data analytics technologies while providing valuable insights to improve energy efficiency.

## Methodology & Standards

### Based on international standards

Our services are based on ISO 50 001 requirements and the PDCA continuous improvement methodology.

### Repeatable approach

Through work across multi and single sites organizations.

### Documented process

We produce reports at every step of our process: screening, detailed audit, action plan, and implementation follow-up.

## Training & Capability Building

### Building your “Energy Champions”

We train energy managers, maintenance, and operations teams for long term results.

### Aligned with Energy Management Systems

We can implement our own or use any EMS for precisely identifying and tracking energy conservative measures thanks to real-time energy consumption data.

### Supporting Multi-Site Organizations

For multi-site organizations, training enables harmonized practices, shared methodologies, and consistent energy performance management across all locations while respecting site-specific constraints.

**By strengthening internal capabilities, training becomes a key enabler for sustained energy performance and decarbonization success.**

# WHY IT MATTERS



## DECARBONIZATION

“Energy efficiency is one of the most powerful and cost-effective tools available to address climate change while supporting economic growth.”

— International Energy Agency (IEA)

### IMPACT

- Reduces energy demand before switching to low-carbon supply
- Delivers immediate and measurable CO<sub>2</sub> reductions



## OPERATIONAL PERFORMANCE

With the increasing use of smart meters, real-time visibility enables faster decision-making, more reliable operations, and sustained performance improvements.

### IMPACT

- Reduces energy waste and operating costs
- Stabilizes processes and improves reliability
- Drives continuous improvement across operations



## COST REDUCTION

“Many energy efficiency measures can reduce emissions while delivering net cost savings over their lifetime.”

— IPCC, AR6 Working Group III

### IMPACT

- Lowered energy consumption and utility bills
- Reduced exposure to energy price volatility
- Improved capital investments with shorter payback



## REGULATORY COMPLIANCE

Navigate increasingly complex energy and climate regulations by providing structured processes, reliable data, and documented performance improvements.

### IMPACT

- Enhanced compliance with energy and emissions regulations
- Reliable data for audits, reporting, and disclosures
- Alignment with recognized standards such as ISO 50001

# SERVICE CONTRACTS

With more than 120 years of experience and advanced know-how in energy industry sector, we offer our customers results-driven consulting services for GridBeats™ Energy Efficiency Solution. Our expert team provides support and expertise in a full range of activities:

## Energy Efficiency Audits

We deliver a structured and in-depth assessment of energy performance across industrial facilities and operations. Through detailed analysis of energy consumption, processes, equipment, and existing instrumentation, we identify inefficiencies, quantify energy and cost-saving opportunities, and define priority actions to reduce emissions while maintaining operational reliability. Where required, audits can also include site survey assessments to evaluate metering coverage and define requirements for implementing or enhancing energy performance metering systems.

Audits can be delivered as one-time assessments or as part of a recurring audit program that supports continuous improvement. They may focus on a single site or be conducted at the organizational level. Each audit results in a clear, actionable report that supports informed decision-making.

## SERVICES TAILORED TO YOUR NEEDS

Industries are increasingly focused on sustainability while they continue to drive productivity, reliability, and efficiency. At GE Vernova, we understand that achieving these KPIs require the right expertise, responsiveness, and flexibility.

**DO YOU HAVE ENOUGH TIME AND RESOURCES TO CONTINUOUSLY MONITOR AND IMPROVE ENERGY EFFICIENCY?**

**WE CAN DO IT FOR YOU!**

Our industrial decarbonization support helps organizations navigate the complexity of reducing greenhouse gas emissions while maintaining operational performance and competitiveness. We work with customers to assess current energy use and emissions, identify and prioritize reduction levers, and define clear, actionable decarbonization roadmaps.

Support can be provided at site level or across multi-site organizations, as a one-time engagement or a long-term program. By combining energy efficiency expertise, data-driven analysis, and best-available electrification technologies, we help customers turn decarbonization objectives into measurable and sustainable results.

## Trainings

Our training programs for energy managers are designed to build internal capability and ensure long-term energy performance improvements. They combine technical knowledge, practical methodologies, and real-world examples to help participants effectively manage energy use, identify efficiency opportunities, and support decarbonization objectives.

## Renewable adoption support

We support industrial customers in integrating low-carbon energy solutions through rigorous, high-quality technical studies and engineering-grade designs. We combine deep expertise in power systems, renewable technologies, and industrial operations to assess, design, and integrate photovoltaic systems, microgrids, and energy management solutions that are robust, reliable, and aligned with site-specific constraints. Our key differentiator lies in the quality and depth of our technical work: detailed data analysis, realistic performance assumptions, careful consideration of grid interactions, and designs developed with operability, safety, and maintainability in mind. By grounding every recommendation in practical engineering and real operational conditions, we ensure that renewable solutions are not only viable in theory but deliver resilient performance, long-term value, and measurable decarbonization results in complex industrial environments.

### HIGHLIGHTS

Deep technical expertise delivering engineering-grade solutions across energy efficiency, digital technologies, renewable integration, and industrial processes.

Proven ability to translate complex data and technologies into practical, operational, and measurable performance improvements

Strong industry knowledge, particularly in heavy machinery, automotive, rubber, and steel, to help deliver solutions for actual production constraints.

## Technology Adoption support

Our technology adoption offering helps industrial customers turn increasing volumes of operational and energy data into measurable performance improvements through high-quality technical design and deployment. We support the structured adoption of smart meters, IoT architectures, Energy Efficiency and Emissions Systems, AI-based forecasting tools, and Asset Performance Management (GridBeats™ APM) solutions, ensuring they are built on reliable data and aligned with real operational needs. Our key differentiator lies in the quality of technical work: detailed instrumentation surveys, robust data architecture design, and careful integration with existing IT and OT systems. By combining advanced analytics with deep operational understanding, we enable customers to move beyond data collection toward predictive insights, improved asset reliability, and sustained energy and decarbonization performance.

## Benefits

We support industrial customers by improving operational and energy performance through rigorous, process-focused analysis. We bring strong, field-proven expertise in heavy industrial operations, along with deep experience across the rubber, automotive, and steel sectors. This allows us to address complex processes with a clear understanding of production constraints, quality requirements, and safety considerations. Our differentiator lies in the depth and quality of our technical work, combining detailed process observations, data-driven analysis, and practical improvement recommendations grounded in real operating conditions. By working closely with site teams, we help deliver improvements that enhance process stability, reduce energy intensity, and support decarbonization objectives while enhancing productivity and reliability.



# ENERGY AUDITS

Performing detailed site walkthroughs to identify energy efficiency opportunities with the best ROI while building a comprehensive action plan to save energy and decarbonize.

## Benefits

- Identify energy-saving opportunities
- Reduce energy costs
- Improve overall energy efficiency and performance
- Enhance sustainability efforts

## Typical steps

- Initial Consultation: Understand needs and objectives
- Data Collection: Gather energy usage data and perform site visits
- Analysis: Analyze data to identify inefficiencies
- Report: Deliver a detailed report with recommendations
- Implementation Support: Assist with implementing recommended actions (optional)

## Optional add-ons

- One-Time Audits: Single, comprehensive assessment of facility
- Recurring Audits: Regular assessments to continually identify new opportunities for improvement
- Asset-level loss and reliability analysis for primary assets
- Organization-Level Audits: Comprehensive assessment across multiple sites to identify organization-wide efficiency improvements



# DECARBONATION SUPPORT

We help organizations define and execute a structured pathway to reduce greenhouse gas emissions while maintaining operational performance and competitiveness.

## Benefits

- Clear and actionable decarbonization roadmap
- Prioritized investments with improved cost and impact
- Reduced emissions while preserving operational performance

## Typical steps

- Gap Analysis: Assessment of current energy use and emissions baseline
- Identification and prioritization of energy efficiency and CO<sub>2</sub> reduction levers
- Support for governance, data management, and performance tracking
- Alignment with regulatory requirements and recognized standards (including ISO 50001 where relevant)

## Optional add-ons

- Energy efficiency audits (detailed or recurring)
- Smart metering and data integration
- Assistance with subsidy applications
- Capex prioritization for primary assets maintenance and replacements
- Outcome-based solution



# TRAININGS

Our training programs are designed to equip energy managers with the skills and knowledge needed to effectively manage energy usage and implement energy-saving initiatives.

## Benefits

- Enhanced skills and knowledge in energy management
- Improved ability to identify and implement energy-saving measures
- Better alignment of energy strategies with organizational goals

## Typical steps

- Needs Assessment: Evaluate specific training needs of the energy management team
- Course Development: Create a customized training program
- Delivery: Conduct training sessions (in-person or virtual)
- Evaluation: Assess the effectiveness of the training and gather feedback

## Optional add-ons

- Standard Training: Comprehensive courses covering energy management best practices
- Customized Training: Tailored programs to meet specific organizational needs
- GridBeats™ Energy Efficiency Solution Platform Trainings
- Dedicated modules on primary asset efficiency and performance



# RENEWABLE ADOPTION

Our experienced team of experts delivers structured, brand-and-technology-agnostic assessments for adopting renewable energy and microgrid solutions within your energy infrastructure, transforming opportunities into practical designs aligned with operational, technical, and financial requirements. We deliver solutions that bring economic value and decarbonization together.

## Benefits

- Reduced CO<sub>2</sub> emissions and energy costs
- Improved energy resilience and security
- Enhanced interaction between on-site loads, renewables, Battery Energy Storage and grid
- Competitive sustainability edge

## Typical steps

- Data collection, site survey & energy performance assessment
- Tailored opportunity identification and feasibility study
- Business case & roadmap

## Optional add-ons

- Detailed design
- Project Implementation
- Financing options
- Support with funding application
- Integration with Microgrid Energy Management Systems



# TECHNOLOGY ADOPTION

Industrial organizations are increasingly adopting AI and data-driven technologies, yet many struggle to translate data into value. We support customers in selecting and deploying advanced digital solutions that turn reliable data into actionable insights for energy, asset performance, and decarbonization.

## Benefits

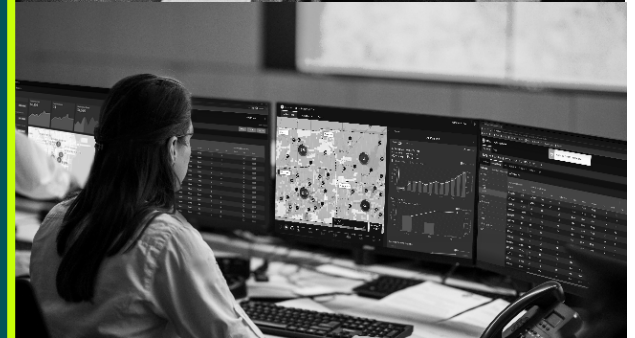
- Data-driven decision-making and predictive insights
- Improved asset performance and reduced down-time
- Strong foundation for energy management and reporting

## Typical steps

- Digital readiness & needs assessment through the review of existing instrumentation, data sources, and IT/OT landscape
- Technology selection & architecture design
- Existing metering & sensor survey
- Deployment support
- Analytics, visualization & use case enablement

## Optional add-ons

- Single-site or multi-site roll-outs
- Energy-focused, asset-focused, or integrated solutions
- Advanced analytics use cases, including AI-based forecasting and asset performance insights
- GridBeats™ Asset Performance Management (APM), Monitoring & Diagnostics solutions



# PROCESS IMPROVEMENT

We offer hands-on, process-focused support designed to improve both energy efficiency and operational performance. Our engagements are grounded in deep sector expertise and close collaboration with site teams to ensure realistic, implementable improvements.

## Benefits

- Reduced energy consumption and operating costs
- Improved process stability and productivity
- Sector-specific improvement approaches
- Direct contribution to decarbonization targets

## Typical steps

- Process & energy baseline assessment
- Opportunity identification & quantification
- Control loops assessment and optimization
- Action plan and reports delivery

## Optional add-ons

- Implementation & performance verification
- Single process or full production line optimization
- One-time study or recurring optimization program
- Site-level or multi-site approach



Our experts can work with you to design  
an optimal offer for you.  
Contact us at:  
[governova.com/grid-solutions/contact](https://governova.com/grid-solutions/contact)

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