



Power Generation Solutions

# FUTURE-READY POWER FOR THE ENERGY TRANSITION



A Rolls-Royce  
solution



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Creating a greener tomorrow

# FUTURE-READY POWER FOR THE ENERGY TRANSITION

01

At Rolls-Royce, we provide world-class power solutions and complete lifecycle support under our product and solution brand **mtu**.

## Driving the energy transition

We harness the potential of digitalisation and electrification to develop carbon-neutral power generation solutions that are even cleaner and smarter, providing answers to the challenges of climate change and society's rapidly growing demands for energy and mobility. We supply and service a comprehensive range of powerful and reliable generator sets based on gas and diesel engines with fuel flexibility (e.g. natural gas, biogas, hydrogen, HVO) as well as dynamic UPS solutions and battery energy storage systems and intelligent control solutions.

The increasing integration of renewable energies into the energy supply mix, alongside electrification and advancements in energy storage, are critical drivers of this transition. Our systems contribute to this goal by providing solutions that ensure independent and decentralized energy supply systems, ultimately offering a reliable infrastructure to facilitate a successful energy transition.

# DRIVING THE ENERGY TRANSITION WITH THE RIGHT SOLUTIONS

We are enabling the energy transition with a broad portfolio of solutions that are available today to create a greener tomorrow.

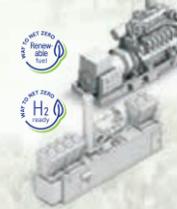
We provide the expertise, equipment, and services needed to integrate complete energy solutions. Our power solutions cater to various applications, including healthcare, hotels, data centers, manufacturing, and independent power plants, ensuring reliability when it matters most.

## Solutions legend:



### mtu diesel generator sets

Approved to run on renewable fuels such as HVO.



### mtu gas generator sets

Utilizing natural gas, biogas or other gases and hydrogen blending for continuous power and CHP solutions.



### mtu Kinetic PowerPacks

Ensure reliable, uninterrupted electrical power and power conditioning.



### Battery energy storage systems (BESS)

The *mtu* EnergyPack is a scalable solution for autonomous off-grid facilities.



### mtu EnergetIQ Manager

The *mtu* EnergetIQ Manager is the brain of your power plant. It controls groups of power generation and storage assets including integration of renewables like solar and wind.



### mtu Service Solutions

Our Service Solutions are designed to maximize performance, extend life, and provide expert support.

# MISSION CRITICAL AND BACKUP POWER SOLUTIONS

# 02

You need power when it matters. We provide it with systems that are efficient, economical, and eco-friendly.

The energy landscape is changing, but the one constant is the need for reliable power. Whether you are securing data, critical processes, sensitive manufacturing, or powering life-saving equipment, we have the backup power solutions to ensure your power never fails.

We offer backup power generator sets fuelled by diesel, gas and sustainable fuels such as HVO, biogas and hydrogen blending.

## Mission critical and backup power solutions ecosystem

### mtu diesel generator sets

Diesel gensets provide reliable power supply. They feature low fuel consumption, long service intervals and low emissions.

### mtu gas generator sets

Gas gensets are perfect for a wide range of applications.

### Dynamic UPS

mtu Kinetic PowerPacks provide uninterruptible power and power conditioning (power quality improvement) for highly sensitive applications.

### mtu EnergetIQ Manager

Public grid

Load  
(E.g. hospitals, airports, data centers, industrial facilities)



## DID YOU KNOW?

mtu mission-critical power solutions are...

POWERING CHIP PRODUCTION FOR ONE OF THE WORLD'S LARGEST SMARTPHONE MANUFACTURERS.

ENABLING UNINTERRUPTED POWER SUPPLY FOR THE WORLD'S LARGEST TELESCOPE IN THE ATACAMA DESERT IN CHILE.

SAFEGUARDING EVERY THIRD FILE IN THE CLOUD WORLDWIDE.

mtu standby generator sets

# MORE THAN 50 YEARS OF POWER GENERATION EXPERIENCE

Customers around the world trust us to provide reliable power for a wide range of applications, including healthcare facilities, data centers, airports, waste water treatment and manufacturing plants as well as independent power stations. Our product portfolio covers diesel and gas generator sets up to 3,250 kWe (60Hz) and up to 4,000 kVA (50Hz).

Your benefits at a glance:



Superior power with industry leading load factors and best in class low-load capability.



Mature and reliable technology to maximize resilience.



Best load acceptance and excellent transient behaviour guarantees highest power quality.



Low emissions with sustainable fuels such as HVO, exhaust gas treatment systems and optimized test run intervals.



Smallest footprint and highest power density.



mtu Series 4000 diesel genset (60 Hz)

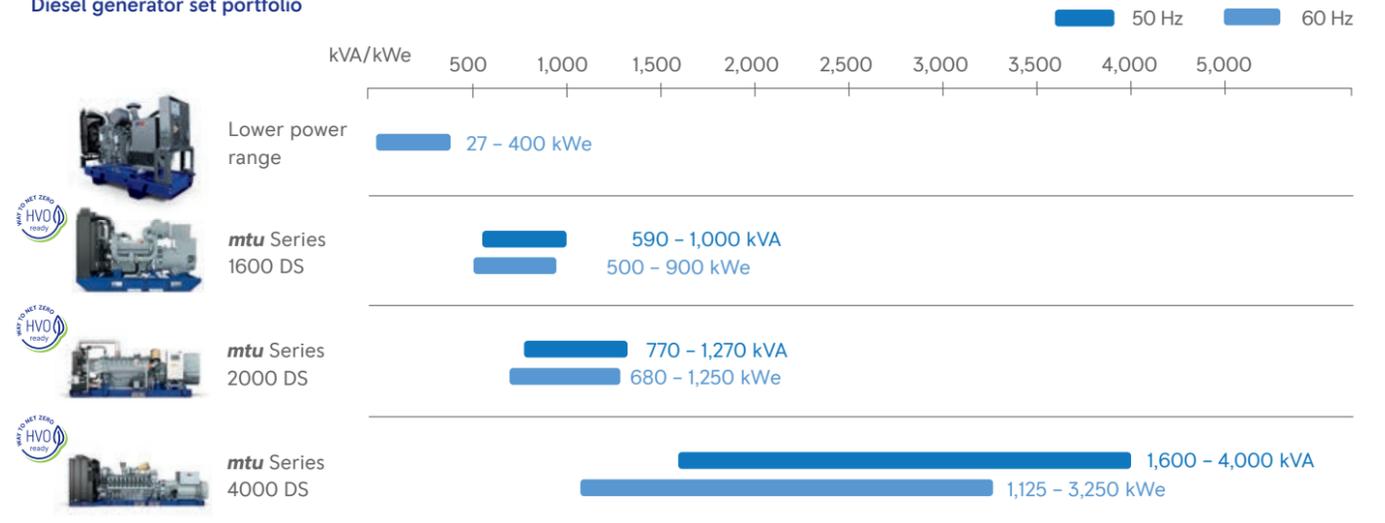


1 Manufacturing facility in Mankato, Minnesota, USA  
2 Manufacturing facility in Ruhstorf, Germany

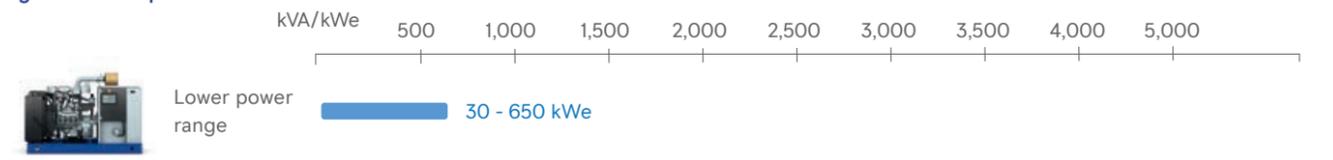


Scan the QR code to learn more about **mtu** diesel gensets.

Diesel generator set portfolio



Gas generator set portfolio



## FEATURED SERVICE SOLUTION: LTBO

Our Lifetime-Based Overhaul (LTBO) is specifically designed for Series 4000 diesel engines used in standby power generation applications. Even with limited operating run times, engine components such as elastomeric seals and gaskets need to be replaced over time to ensure

optimal reliability and performance. With our LTBO, our trained technicians replace all time-worn components, conduct a thorough cleaning and inspection of your engine, exchange filters and coolants and certify your engine for another lifecycle.

**mtu** Kinetic PowerPacks

# DISCOVER THE BENEFITS OF KINETIC ENERGY

Meeting your critical power, space, and individual requirements, **mtu** Kinetic PowerPacks present a sophisticated alternative to traditional static UPS systems. The dynamic UPS technology is based on kinetic energy and consists of a kinetic energy accumulator which is coupled to a diesel engine via an electromagnetic clutch.

A state-of-the-art manufacturing facility in Belgium builds our **mtu** Kinetic PowerPack products: single units with ratings between 480 kVA/400 kWe and 2,750 kVA/2,640 kWe offered at 50 Hz and 60 Hz frequencies. Multiple units can be combined to provide higher installed ratings.

Mounted on a single base frame, the **mtu** Kinetic PowerPack incorporates an **mtu** diesel engine, synchronous machine, accu kinetic energy module, and clutch mechanism. Floor-standing control (COP) and power (POP) panels complete the system.



- 1 **mtu** diesel engine
- 2 Synchronous machine
- 3 Kinetic energy module
- 4 Vibration isolation
- 5 Power panel
- 6 Control system
- 7 Electromagnetic clutch

The **mtu** Kinetic PowerPack KP7



The competence centre for dynamic uninterruptible power supplies in Liege, Belgium.

**mtu Kinetic PowerPack**



**mtu** Kinetic PowerPack KP5



**mtu** Kinetic PowerPack KP7



Scan the QR code to learn more about our **mtu** Kinetic PowerPack solutions.



**Significantly longer lifetime** compared to static UPS, with 20+ years design life.



**Smallest footprint and highest power density**, up to 40% less space consumed compared to static UPS.



**Guaranteed power security**, with redundant starting ensuring 0 sec. interruption even in case of engine starter failure.



**Best TCO values** for power ratings above 1,500 kVA.



**Superior power conditioning & installation discrimination**, by others up to  $\pm 0.4$  Hz permanent frequency and  $\pm 10\%$  permanent voltage tolerance from mains, and 17x nominal current for short-circuit protection.



**Maximum solution flexibility**, from low ( $\pm 400$  V) to medium voltage ( $\pm 13$  kV), containerized, enclosed or building integrated.



**Elimination of batteries**, avoiding pollution during production and waste from exchange and disposal.



## FEATURED SERVICE SOLUTION: LIFE EXTENSION

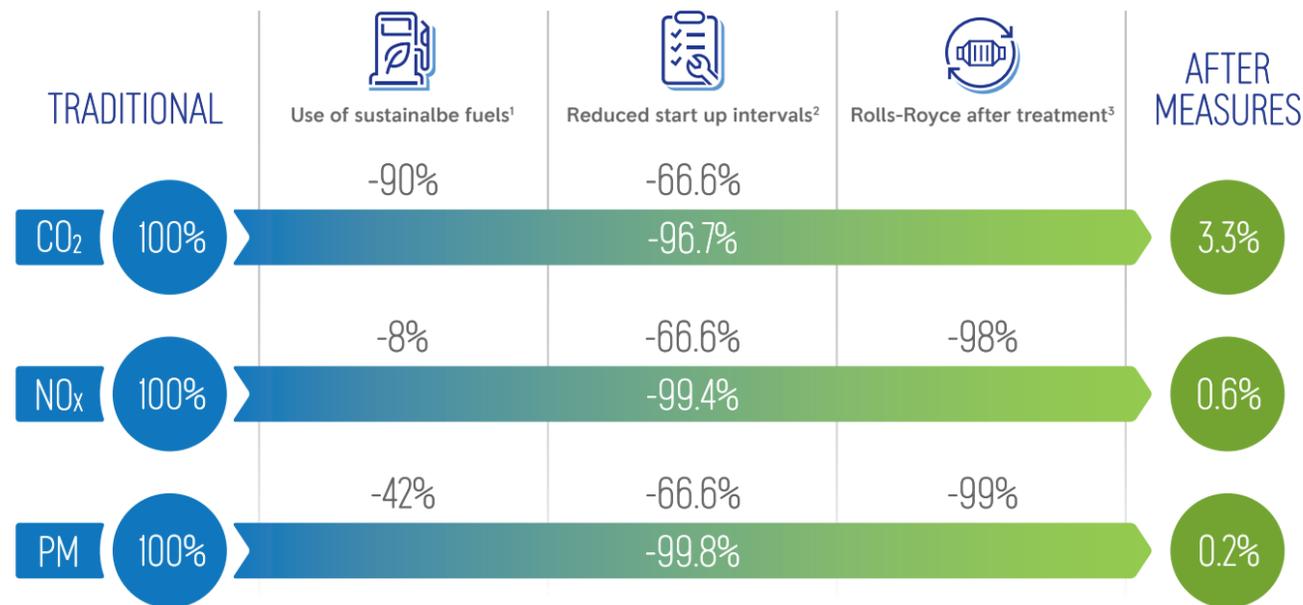
The **mtu** Kinetic PowerPack life extension program involves more than a general overhaul of exchanging bearings and brushing up components of the kinetic energy storage unit. Parts for classic control systems based on the older type of printed circuit boards are becoming more and more obsolete. We offer latest upgrades with the control system KS-Vision® 2.0.

It extends the lifetime of **mtu** diesel engines from 20 to 30 years and more with periodic inspections. New technologies like selective catalytic reduction (SCR) meet latest local government diesel emissions standards. Existing power distribution panels with outdated switchgear is also replaced and serviced.

Ready today for a changing tomorrow

# FUTURE READY BACKUP POWER SOLUTIONS

With the right mix of **mtu** diesel generator set solutions, customers can already today\* save up to 90% of CO<sub>2</sub>, NO<sub>x</sub> and particulate (PM) emissions, compared to conventional emergency power operation, without any reduction in performance. These solutions use sustainable fuels (HVO), aftertreatment systems and extended test run intervals, which have already proven to be effective for customers around the world.



\*Based on **mtu** Series 4000 diesel generator set.

<sup>1</sup> Well-to-wheel CO<sub>2</sub> reduction depending on feedstock and process, up to 90%. NO<sub>x</sub> and PM reduction in measured on **mtu** Series 4000 in D2 cycle.

<sup>2</sup> Reduction of start-up interval: from monthly to each 3 months.

<sup>3</sup> After treatment reduction values: Up to 98% NO<sub>x</sub> and 99% PM achievable with optimized engine / after treatment systems.



## Sustainable fuels

### Use of sustainable fuels (HVO)

HVO (Hydrotreated Vegetable Oil) belong to the group of paraffinic diesel fuels (EN15940 & ASTM D975). It is a sustainable drop-in fuel produced via hydrotreatment process. HVO has been tested and approved for use in many **mtu** engines and systems, and can significantly lower emission already today due to commercial availability.

Take a look at our numbers: More than 90% reduction for CO<sub>2</sub>, a 40% reduction for particulate matter (50-80% PM reduction in power generation applications) and an 8% reduction for NO<sub>x</sub>. Exact emission values depend on the manufacturing process and feedstock of the HVO as well as the engine series and type.



Scan the QR code to learn more about HVO.



Diesel vs. HVO



## Aftertreatment

### Exhaust gas aftertreatment

An exhaust gas aftertreatment (EGAT) system can help keep local emissions such as NO<sub>x</sub> or particulate matter to an absolute minimum.

**mtu** EGAT solutions are precisely tailored to fit its engines while granting full power, best load acceptance, super-fast startup times and absolute resilience. We have extensive experience in the design, project planning and commissioning of EGAT systems for large power generation projects (in the three-digit megawatt range).



## Extended test run intervals

### Extended test run intervals for **mtu** Series 4000 Gx3/Gx4 diesel generator sets

Our thoroughly tested and manufacturer-certified extended test run solutions lengthen intervals from once a month to every three months under specific conditions. This allows operators to not only reduce emissions and achieve ambitious sustainability goals, but also to effectively lower operating costs. The solution is available as an upgrade to existing systems (refit) and as an option for new gensets.



Scan the QR code to learn more about our extended test run intervals.

# CONTINUOUS AND COMBINED HEAT AND POWER (CHP) SOLUTIONS 03

With over 60 years of experience with gas-powered generator sets, we offer a variety of continuous, grid stability and prime power solutions to keep your operation running smoothly, efficiently and more sustainably.

In a fast-changing world with ever-increasing energy demands, you need a power generation supplier that can independently and efficiently ensure a continuous power supply.

We provide complete, independent power generation solutions such as biogas and natural gas fueled generator sets wherever — and whenever — reliability is needed. We have thousands of installations worldwide, and are trusted to provide complete power solutions, 24/7.



## DID YOU KNOW?

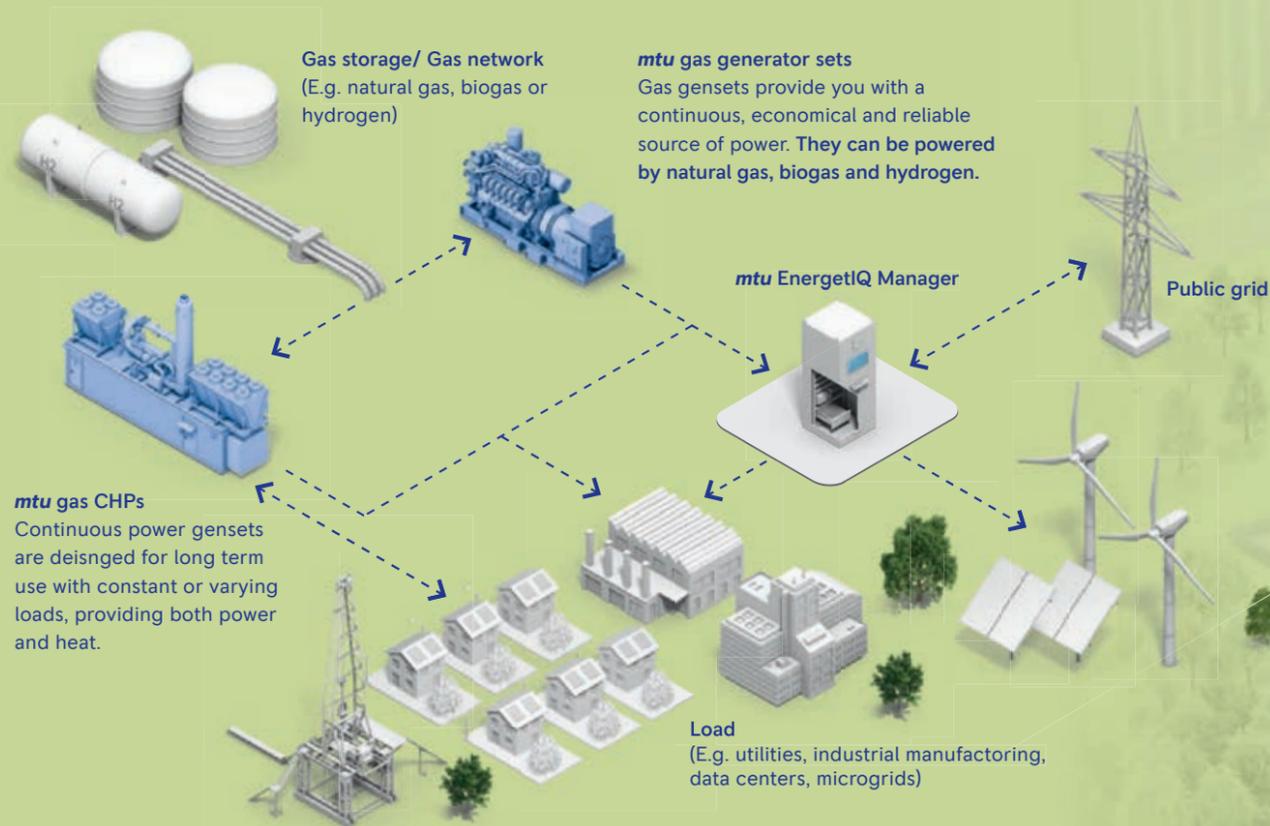
Based on the installed fleet, our **mtu** continuous power solutions are capable of:

CHARGING  
**130,000**  
ELECTRIC CARS AT THE  
SAME TIME.

SUPPLYING  
**50%**  
OF GERMAN HOUSEHOLDS  
WITH ELECTRICITY  
EVERY DAY.

HEATING  
**3.2 MILLION**  
OLYMPIC-SIZED SWIMMING  
POOLS TO 27°C.

### Continuous prime and grid stability power solutions ecosystem



**mtu** gas generator sets

# READY FOR EVERY CHALLENGE

Continuous power gas gensets are designed for long-term use with constant or varying loads. They are primarily used for base load power generation in remote locations with limited access to the public grid, and can be operated with island, island-parallel or grid-parallel applications.

They can also be used for combined heat and power generation (CHP), prime and grid stability power. Finally, gas gensets serve as flexible balancing energy to secure the fluctuating output of renewable energy sources.

All of our gas gensets are high efficiency and low emissions systems in the 760 – 2,520 kWe power range.

 High efficiency (electrical efficiency above 44%) and superior lifetime (**TBO 84.000 hrs**) to minimize lifecycle costs.

 Highly flexible operation with fast start capability at best-in-class power density.

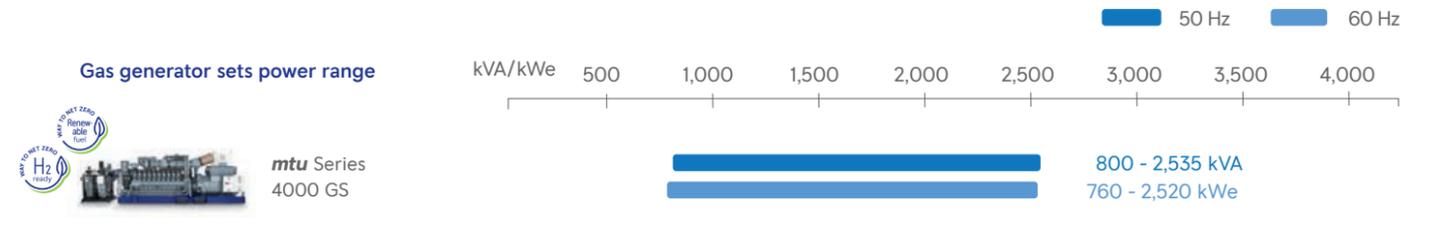
 Mature and reliable technology to maximize resilience.

 Low emissions with biogas or hydrogen blendings and exhaust gas treatment systems.

 Designed for standard containers to ensure optimum mobility.



Manufacturing facility in Augsburg, Germany



Scan the code to learn more about our **mtu** gas generator solutions.



## mtu UPGRADES & REFITS SOLUTIONS

Get the most out of your equipment with **mtu** upgrade solutions.

- Upgrade solution **mtu** Series 4000 L33 for L61/62/63
- SCR refit gas for **mtu** Series 400 and **mtu** Series 4000
- **mtu** Series 4000 L64 upgrade to L64 FNER
- 100% hydrogen retrofit for **mtu** Series 4000



# BE READY FOR CARBON-FREE ENERGY

**mtu** gas-powered generator sets provide continuous, economical, reliable and future-ready power utilizing natural gas, biogas or hydrogen.

### From biomass to megawatts

One very promising fuel for generating clean, economical and sustainable electricity and heat is biogas. Simple to produce through the fermentation of organic matter, it is truly a reliable fuel for the future which is already available today. Biogas has three major advantages: It can be stored, it is very economical to produce, and it is very eco-friendly. Our new generation of **mtu** gas gensets allows for cost-saving, sustainable and efficient operation using biogas. Continuously updated and further developed for over 25 years, the **mtu** Series 4000 optimizes the use of biogas both for primary power supply and to balance energy peaks. And best of all: It also creates the potential for a new revenue stream through waste-to-energy applications.

### Green hydrogen – the fuel of the future

Renewable energy sources will play a key role in the energy supply of the future, especially from sources such as the sun and wind. Hydrogen produced by electrolysis from renewable energy sources is known as 'green' hydrogen. Hydrogen generated in this way can be used as a climate-neutral fuel by modern gas engines, which convert it into electricity and heat in a highly efficient manner. The waste heat can be used for heating and cooling. Our new **mtu** Series 4000 natural gas systems can be upgraded to run on green hydrogen.

Ready today for a changing tomorrow

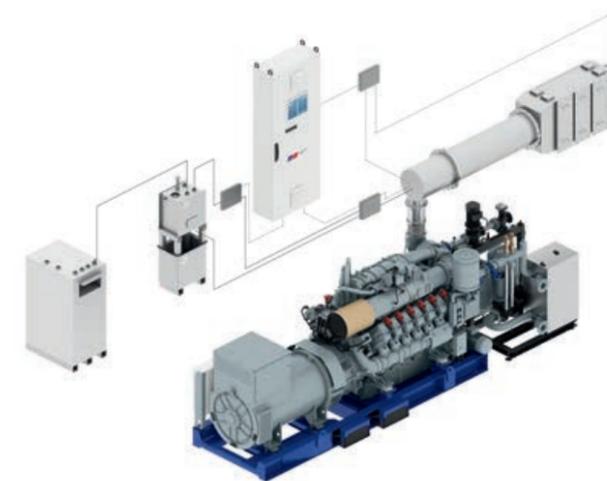
## FUTURE READY SOLUTIONS FROM A SINGLE SOURCE

Exhaust gas aftertreatment (EGAT) systems are designed to clean harmful post-combustion emissions before they leave the engine. They also help customers meet increasingly stringent emissions regulations like the German 44th BImSchV ordinance. The **mtu** EGAT system is optimally designed to keep **mtu** gas genset emissions to an absolute minimum.

### Quality components

The **mtu** EGAT system combines a selective catalytic reduction (SCR) system and an oxidation catalyst to enable full emissions compliance of **mtu** gas engines. Decades of experience have gone into the

development of both catalysts, which achieve up to 21,000 operating hours and a 90% conversion rate.



### Selective catalytic reduction (SCR)

The process of converting the harmful nitrogen oxides (NO<sub>x</sub>) in exhaust gas into water (H<sub>2</sub>O) and nitrogen (N<sub>2</sub>) is referred to as selective catalytic reduction (SCR).

### Oxidation catalyst

Located downstream from the SCR system, the oxidation catalyst converts the carbon monoxide (CO) and formaldehyde (HCHO) into nontoxic carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O).

### EGAT control functions

The **mtu** EGAT system features functions such as pump control that reduces the need for agent metering and monitoring. When integrated with the **mtu** Module Control (MMC) system, it handles several additional functions such as remote control, data logging, error detection, alarm logging, visualization and digital interfaces.

### 44th BImSchV regulations

The 44th BImSchV ordinance, which has been in effect in Germany since 2019, requires that medium-sized combustion plants must be equipped with a suitable exhaust gas aftertreatment (EGAT) system by 2023. The **mtu** EGAT system effectively addresses these and other demands for stricter emission limits, for shortened measurement intervals or the provision of evidence, documentation and reports.

### End-to-end system support

The **mtu** EGAT system is precisely adapted for every installation to ensure that gas systems operate as cost-efficiently, trouble-free and emissions friendly as possible. Beginning with the careful analysis of system and installation requirements, available space and accessibility for maintenance measures, we provide expert support during the project implementation, commissioning and over the entire system lifecycle.

# ENERGY STORAGE SOLUTIONS

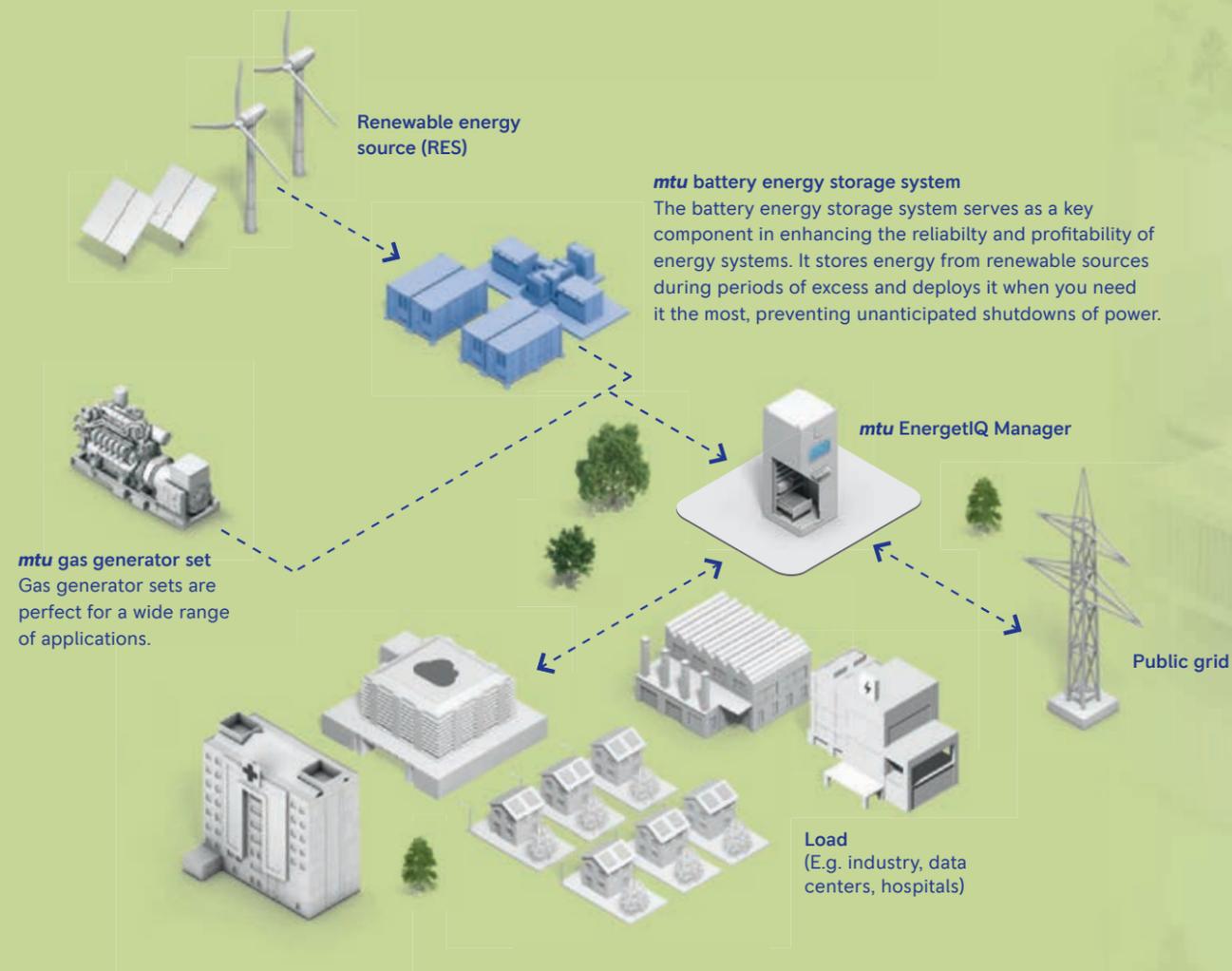
# 04

Optimize your energy potential with innovative battery solutions for a sustainable future.

In response to rising electricity demand driven by economic growth, population increases and further electrification, the energy sector is undergoing a significant transformation. As governments and industries worldwide move toward distributed renewable energy sources, traditional centralized grids are facing new challenges. The **mtu** EnergyPack provides a cutting-edge solution for large-scale energy storage, seamlessly integrating renewable sources like solar

and wind power. It ensures grid stability, enhances energy reliability and supports the transition to future-ready, sustainable power systems. Combined with the **mtu** EnergetIQ Manager it efficiently stores and dispatches energy bringing together high-quality hardware, intelligent software and unparalleled service.

## Energy storage solution ecosystem



## DID YOU KNOW ?

Our expertise and experience have enabled us to achieve a proud track record and to continuously improve product performance.

>500 MWh  
CAPACITY  
INSTALLED.

ONE BATTERY DISCHARGE  
CAN POWER  
55K  
EU HOUSEHOLDS PER DAY.

>200  
PROJECTS REALIZED  
WORLDWIDE.

**mtu EnergyPack**

# MAXIMIZE EFFICIENCY AND RESILIENCE WITH THE **mtu** ENERGYPACK QG

The **mtu** EnergyPack QG design is based on a building kit of standardized and serialized modules that facilitate flexible system configurations of any scale tailored to your specific requirements. Comprised of six essential components - battery racks or containers, power conversion system, medium voltage (MV) transformer,

MV switch gear, auxiliary power cabinet and the **mtu** EnergetIQ Asset Controller - it offers comprehensive solutions for diverse applications including renewables integration, grid services, energy trading, peak shaving and others.

**Sample base unit configuration with battery containers:**



Images may be updated to reflect ongoing technical developments.

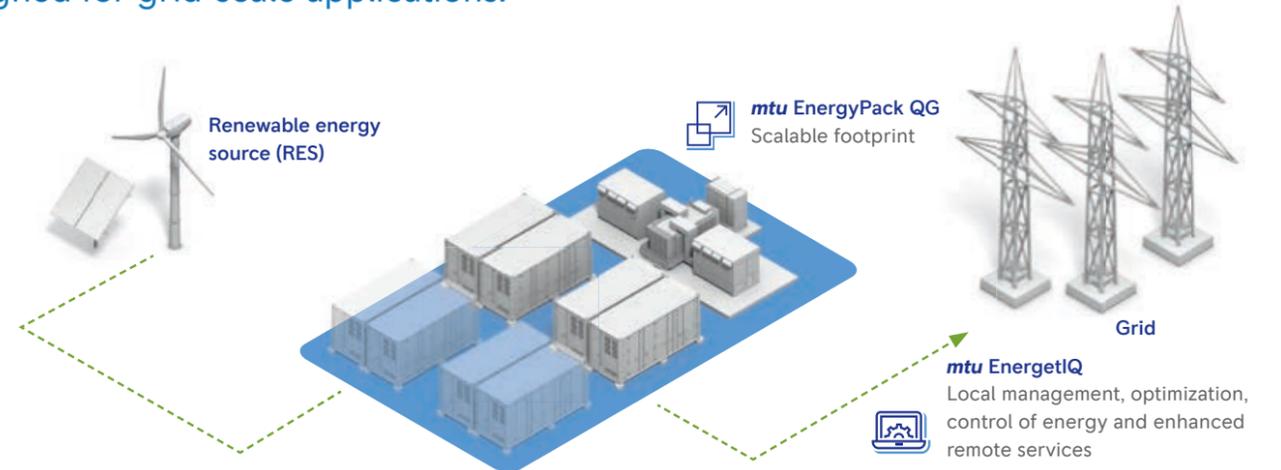
Capacity per base unit: 1 - 4 hour solutions with 2 - 48 MWh  
Power per base unit: 2 - 9 MW  
Output Voltage: 6.6 - 34.5 kV

Reference below: **Semperpower, Netherlands:**  
The **mtu** EnergyPack QG system project for Semperpower is the largest battery storage system in the Netherlands as of its commissioning and ranks among the largest in the European Union. Our team provided a full EPC solution for this project. Installed power: 30.7 MW / 62.6 MWh



# UNLIMITED SCALING MEETS PROJECT-SPECIFIC NEEDS

The **mtu** EnergyPack QG is the battery energy storage system designed for grid-scale applications.



A complete system design consists of multiple base units, like the example on the left enabling battery energy projects from MWh-scale up to GWh-scale. Each battery rack or container has integrated controls, fire suppression and liquid cooling and heating systems, ensuring reliable operation of your energy storage capacity.

The overall solution is monitored and controlled by our own **mtu** EnergetIQ intelligent control platform and supported by our remote monitoring center (RMC) and our service organization to achieve highest performance and availability.

**Key features based on industry-leading technology**



**Highest level of safety**

- LFP batteries (Lithium Iron Phosphate, LiFePO<sub>4</sub>) batteries with high thermal stability
- Multi-level protective structures with safety mitigation on module, rack, container and control level
- Autonomously controlled HVAC system integrated into the battery racks / containers
- Deflagration venting and dry pipe optional
- Comprehensive testing and verification
- Compliant to international fire & safety standards



**Long service intervals and lifecycle**

- Market leading suppliers of components
- Battery features liquid-cooling system with low cell temperature deviations leading to high lifetime
- Newest battery generation with zero degradation for at least one year and a guaranteed cycle life of >12,000 cycles before reaching 65% State of Health (SOH)



**Low leveled cost of storage (LCOS)**

- Pre-installed and tested modules to minimize installation time, costs and risks
- Industry leading energy density and optimized installation layout to reduce required land area
- High round trip efficiency and slow degradation
- Ultrafast response and load acceptance for the most demanding grid-scale applications



**Intelligent mtu EnergetIQ platform for efficient and reliable operation**

- Automated control of power generation, storage and demand for an optimized operation
- System monitoring, cloud data storage, data management, analysis and visualization for performance analysis and operation
- Flexible and seamless integration of assets (including 3rd party)
- Strong safeguarding of cyber security

# MICROGRID AND DECENTRALIZED ENERGY SOLUTIONS

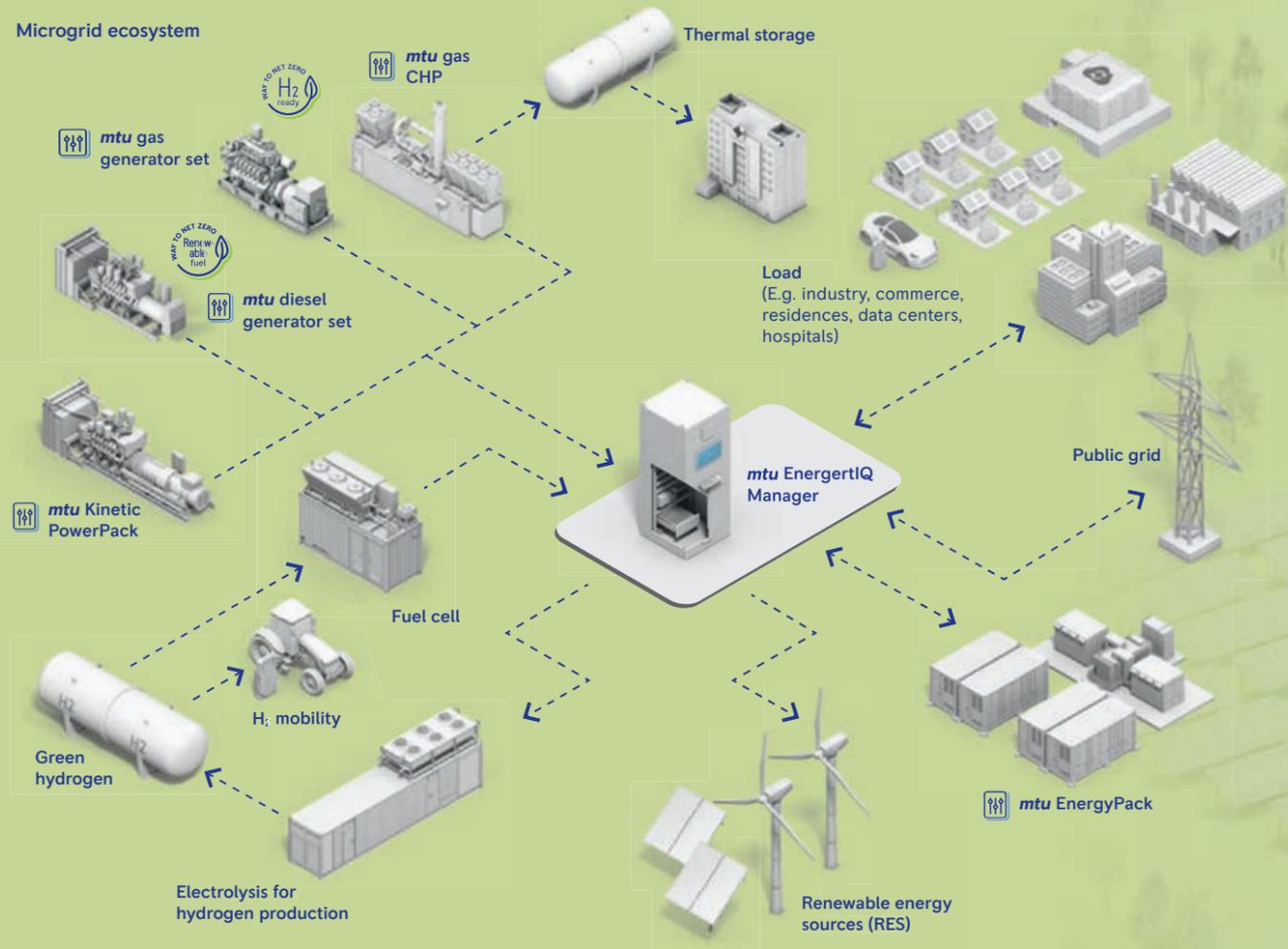
# 05

Microgrid solutions help sustain the future of energy and ensure reliable power supplies to meet customer demands.

By combining different components, microgrid solutions can be tailored to every customer need. The **mtu** microgrid controller

can be used to optimize solutions, reducing opex costs and securing several further important benefits.

## Microgrid ecosystem



## DID YOU KNOW?

Our microgrid solutions offer:

GRID FEE OPTIMIZATION WITH UP TO 80% COST SAVINGS THROUGH ONSITE BALANCING.

CO<sub>2</sub> REDUCTION OF 20-50% OR MORE COMPARED TO THE GRID.

RESILIENCY INCREASE TO 99.99%

**mtu** microgrid solutions

# SAVING MONEY WITH RELIABLE AND SUSTAINABLE SOLUTIONS

Microgrids are decentralized energy systems consisting of a combination of renewable power generation, power storage and conventional power generation in order to meet a given demand. Whether off-grid or on-grid, the centralized **mtu** EnergetIQ Manager is in place to optimize the way the system operates.

Economic growth and growing populations are changing customers' demand for power. Governments and industry are moving towards renewable energy sources such as solar and wind power. At the same time, advancements in digitalization have already transformed many industries.

Whether you are operating infrastructure services or public institutions, or running a commercial business, **mtu** microgrid solutions offers a wide variety of applications and service products, each individually designed to meet your specific needs.

**Demand charge reduction**

Reduce your grid stability power demand by storing power and/or using gensets to lower demand charges which are typically based on the single highest grid stability power draw (in kW) per year.

**Frequency regulation services**

Provide services to grid system operators – via utility companies or energy traders – such as frequency containment reserve, frequency restoration reserve, etc. to support grid frequency.

**Genset flexibilization**

Enable your gensets to accept large load steps and bridge startup times by adding battery storage. In this way, a genset power plant can be upgraded for off-grid operation or backup power.

**Off-grid energy supply**

Provide electricity in areas where no grid is available, or reduce your fuel consumption (and hence electricity costs) for existing power plants in off-grid settings by adding renewable energy sources and storage.

**EV charging integration**

Enable business cases concerning electrification of the transportation sector by providing extra power during certain periods when charging of multiple vehicles exceeds the grid capacity. Match local renewable energy generation and car charging to provide true green charging.

**Genset dispatch optimization**

Reduce your genset runtime and boost genset efficiency by providing spinning reserve from batteries and intelligent load sharing between gensets and batteries whenever gensets are in operation.

**Grid limitation management**

Overcome consumer-side limitations on desired load increase (e.g. factory expansion) due to limited grid connection capacities. Batteries and/or gensets can cover your additional grid stability power loads.

**Self-consumption & self-sufficiency**

Put local power generation units such as solar arrays or CHP plants in place, and use your own power 'behind the meter' instead of feeding it into the grid. Increase your self-sufficiency even further by adding battery storage.

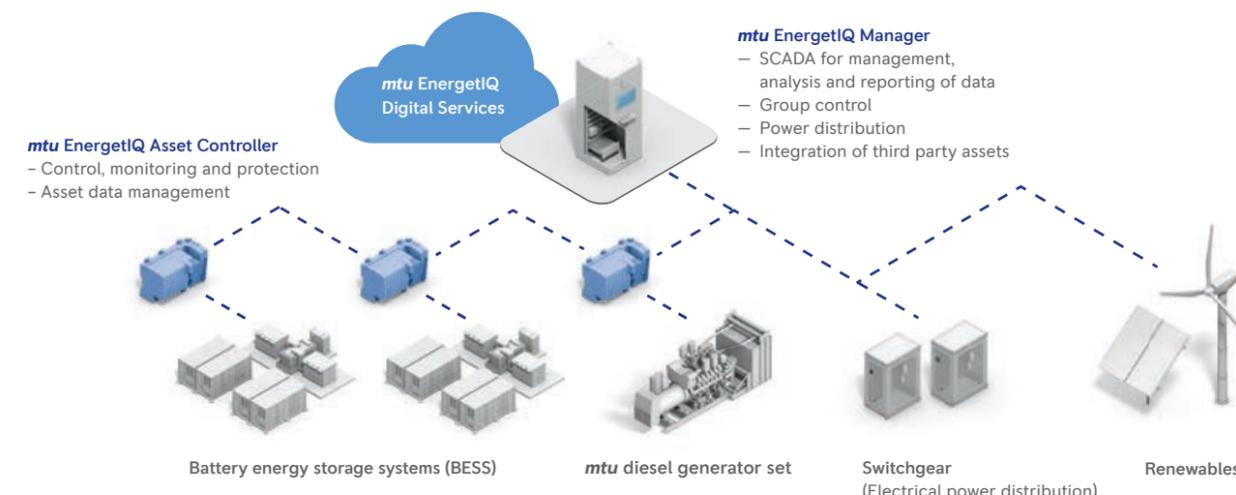


Scan the QR code to learn more about **mtu** microgrid solutions.

**mtu** EnergetIQ Manager

# THE BRAIN OF YOUR POWER PLANT

The **mtu** EnergetIQ Manager optimizes your power plant's performance, by seamlessly integrating its diverse assets and automating the control of power generation, storage, and demand. With the **mtu** EnergetIQ Asset Controller, you can easily control and monitor the functional level of your **mtu** EnergyPack.



Offering	Characteristics
System-wide services	<ul style="list-style-type: none"> <li>– One common user interface for all different assets</li> <li>– Easy SCADA system integration and customization options</li> <li>– User management with audit trail to control and record access to plant manager and assets</li> <li>– IT security concepts according to project-specific analysis</li> </ul>
Data management	<ul style="list-style-type: none"> <li>– Data acquisition of connected assets, switchgear and grid</li> <li>– SQL database with access by web-based query technology</li> <li>– Modular data analysis including correlation to external data</li> <li>– Data visualization and reporting with dashboards and interactive Jasper reports</li> </ul>
Functions	<ul style="list-style-type: none"> <li>– Real-time control, monitoring and protection</li> <li>– Asset health analytics</li> <li>– Multiple BESS applications covered, such as, the reserve market, energy storage control, spinning reserve, load shedding, sector coupling etc.</li> <li>– Wide range of predefined and configurable layouts for trending and reporting</li> </ul>

# mtu SERVICE SOLUTIONS – A LIFETIME OF VALUE

# 08

Our service solutions are designed to maximize performance, extend life, and provide expert support. These solutions are categorized into three main value propositions: **Secure, Sustain, and Support.**



Enjoy peace of mind with maximizing asset performance and reducing operational risks

- Extended Coverage
- **mtu** ValueCare Agreements
- Digital Solutions



Expert service from a reliable partner to keep operations running smoothly

- Support Services
- Genuine Spare Parts & Consumables
- Training
- Maintenance & Repair



Extending equipment life and reducing costs while protecting the environment

- Reman/ Overhaul Solutions
- Upgrades & Refits



### Extended Coverage

Extended Coverage provides you with protection against unexpected repair costs that go beyond your standard warranty. Tailored specifically to meet your needs, it offers financial security and peace of mind.

### mtu ValueCare Agreements

Our long-term service agreements offer additional support and services beyond the standard options. This allows you to focus on your core business while we take care of your equipment needs.

### Digital Solutions

The **mtu** Go platform gives you the opportunity to analyze system data quickly, identify key action steps, and plan them efficiently. It enhances your operational workflows and improves decision-making.



### Reman/ Overhaul solutions

With our **reman** solutions, you can replace your existing engine and system with a high-quality remanufactured unit. Return your original core for a credit note, making it efficient and cost-effective. Our **factory overhaul** service fully restores your engine or system to like-new condition, ensuring adherence to original specifications.

### Upgrades & Refits

As your needs change, our **upgrades & refits** provide the necessary solutions to help you adapt and stay competitive.



### Support Services

With more than 1,200 service locations worldwide – backed by regional Parts Logistics Centers and our Customer Assistance Center – you can count on responsive support by expert technicians, wherever work takes you.

### Maintenance & Repair

On-demand support including professional inspections and preventive maintenance recommendations.

### Genuine Spare Parts & Consumables

Genuine parts that are designed, tested and approved specifically for **mtu** engines and systems. Factory approved consumables to run operations smoothly.

### Training

Whether you need operators to learn how to use the equipment effectively or are developing your own on-site maintenance capabilities, count on our experience and expertise.



Scan the QR code to learn more about our **mtu** Service Solutions.



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