



Middle East  
Energy

50  
YEARS

Interview with

# Rasso Jörg Bartenschlager

General Manager, Al Masood Power Division



**Rasso Jörg Bartenschlager, General Manager of Al Masaood Power Division, is at the forefront of driving critical power solutions that not only meet the region's growing demand but also align with national sustainability goals.**

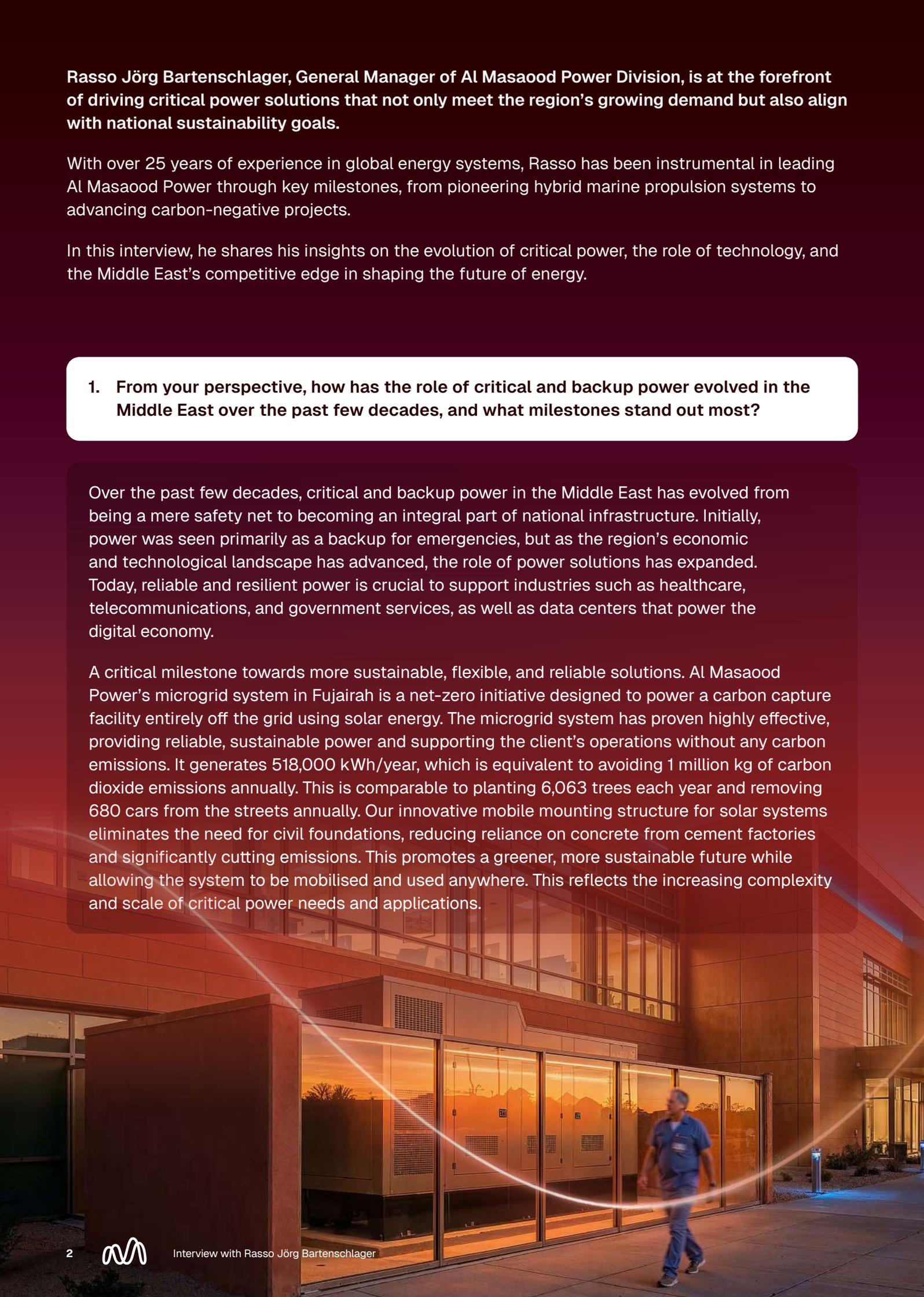
With over 25 years of experience in global energy systems, Rasso has been instrumental in leading Al Masaood Power through key milestones, from pioneering hybrid marine propulsion systems to advancing carbon-negative projects.

In this interview, he shares his insights on the evolution of critical power, the role of technology, and the Middle East's competitive edge in shaping the future of energy.

**1. From your perspective, how has the role of critical and backup power evolved in the Middle East over the past few decades, and what milestones stand out most?**

Over the past few decades, critical and backup power in the Middle East has evolved from being a mere safety net to becoming an integral part of national infrastructure. Initially, power was seen primarily as a backup for emergencies, but as the region's economic and technological landscape has advanced, the role of power solutions has expanded. Today, reliable and resilient power is crucial to support industries such as healthcare, telecommunications, and government services, as well as data centers that power the digital economy.

A critical milestone towards more sustainable, flexible, and reliable solutions. Al Masaood Power's microgrid system in Fujairah is a net-zero initiative designed to power a carbon capture facility entirely off the grid using solar energy. The microgrid system has proven highly effective, providing reliable, sustainable power and supporting the client's operations without any carbon emissions. It generates 518,000 kWh/year, which is equivalent to avoiding 1 million kg of carbon dioxide emissions annually. This is comparable to planting 6,063 trees each year and removing 680 cars from the streets annually. Our innovative mobile mounting structure for solar systems eliminates the need for civil foundations, reducing reliance on concrete from cement factories and significantly cutting emissions. This promotes a greener, more sustainable future while allowing the system to be mobilised and used anywhere. This reflects the increasing complexity and scale of critical power needs and applications.



## 2. With the energy sector shifting rapidly towards renewables and digitalisation, how do you see critical power solutions adapting to meet future needs?

As the energy sector shifts towards renewables and digitalisation, critical power solutions will evolve to be more dynamic and adaptable. The key will be integrating renewable energy sources, like solar and wind, with storage technologies such as lithium-ion batteries, creating hybrid systems that are both sustainable and reliable.

In parallel, digitalisation will drive further innovation in power solutions, with technologies like AI and predictive maintenance enabling real-time monitoring and faster decision-making.

At Al Masood Power, we're already seeing these transitions in action. We are investing heavily in smart grid technologies and energy storage systems to ensure that critical infrastructure remains powered by a combination of traditional and renewable sources, adapting to changes in load and demand.

This integrated approach will become the new standard for ensuring that critical infrastructure remains resilient in the face of changing energy landscapes.

In addition, operate advanced solutions like the mtu Kinetic PowerPack, which offers efficient energy storage and rapid response capabilities, and HVO, a sustainable fuel that reduces emissions while maintaining engine performance, both of which are part of our commitment to a greener future.

## 3. What sets the Middle East apart in driving innovation in power and energy systems, and where do you see the Gulf's competitive edge on the global stage?

The Middle East has a unique competitive edge in the power and energy sector due to its strategic position, strong government backing, and commitment to innovative technologies.

The region is not only one of the largest energy producers but is also investing heavily in energy diversification—pushing the boundaries of renewables, hybrid systems, and energy storage solutions.

What sets the Gulf apart is the collaboration between governments, private sector, and global technology partners. This allows for accelerated implementation of cutting-edge solutions. The UAE's Net Zero 2050 goal and initiatives like the Dubai Clean Energy Strategy 2050 showcase the region's commitment to sustainability, which will ultimately drive the global energy transition.

The Gulf is rapidly emerging as a global leader in smart infrastructure, green technologies, and digital energy solutions, positioning itself as a key player in the global transition towards low-carbon energy.

#### 4. How is Al Masaood Power aligning its strategies with the region's sustainability and net zero ambitions while still delivering reliable power solutions?

Al Masaood Power is deeply committed to supporting the region's sustainability and Net Zero ambitions. We've been proactive in integrating renewable energy sources and energy storage technologies into our solutions, ensuring that our offerings not only provide reliable power but also contribute to a more sustainable energy future.

Our approach includes investments in hybrid power systems, where we combine traditional generators with solar and battery storage to reduce carbon emissions while ensuring 24/7 reliability.

We are also focusing on alternative fuels like Hydrotreated Vegetable Oil (HVO), which can significantly reduce emissions without requiring significant changes to existing systems.

In addition, we are continuously improving the energy efficiency of our systems to help our customers achieve their own sustainability targets.

#### 5. What technologies or innovations, such as hybrid systems, AI, or energy storage, do you believe will be key in reshaping the critical power landscape in the next decade?

In the next decade, I believe the most transformative technologies in the critical power landscape will include hybrid systems, energy storage, and AI.

- **Hybrid Systems:** Combining renewable energy sources (solar and wind) with traditional backup power systems will become the norm. This not only ensures reliability but also helps to lower carbon footprints while providing cost-efficient solutions.
- **Energy Storage:** The adoption of lithium-ion batteries and other advanced storage technologies will be crucial to balancing renewable energy supply and demand fluctuations. This will ensure that even when renewable energy generation is low, backup systems can seamlessly provide power.
- **Artificial Intelligence (AI):** AI will play a pivotal role in predictive maintenance, optimization of fuel use, and real-time monitoring of systems. It will enable us to deliver smarter, more efficient solutions that minimize downtime and improve operational performance. AI-powered systems will allow us to integrate advanced diagnostics and remote monitoring, improving the overall reliability of critical power solutions.

Together, these technologies will reshape how we think about power generation, distribution, and consumption, creating a more sustainable and resilient energy ecosystem.

**6. Looking ahead to 2030 and beyond, what is your vision for the Middle East's power sector, and what role can organisations in this sector play to ensure a resilient and sustainable energy future?**

By 2030, I envision the Middle East's power sector as a leader in sustainable and digital energy systems. The transition to renewables will be well underway, with microgrids driving most of the power generation.

However, hybrid systems, energy storage, and smart grid technologies will ensure that power delivery remains reliable, even as demand and renewable supply fluctuate.

Key market leaders like Al Masaood Power will play a critical role in this transformation by continuing to innovate and provide reliable, sustainable solutions that align with national goals such as Net Zero and green growth.

Through investments in AI, energy storage, and smart infrastructure, we will help create a future where the Middle East not only meets its energy demands but also leads the way in energy efficiency and climate resilience.

At the same time, companies in the power sector must prioritize workforce development, reskilling, and continuous skill advancement as the shift to digital energy systems requires a new generation of skilled engineers and technicians.

By fostering talent development and collaborative partnerships, we can ensure that the Middle East is well-equipped to meet the challenges and opportunities of the future.