

# WHAT if?

Revealing the Future of the Battery in the Present Moment







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Welcome to a world of limitless possibilities and extraordinary potential with MPGA battery technology!

Imagine a world where industries across the board, from transportation to telecommunications, from renewable energy to consumer electronics, can harness the full potential of MPGA battery. It's a world where electric vehicles redefine mobility, where drones revolutionize delivery services, where power grids become smarter and more resilient, and where energy storage systems transform the way we consume and distribute electricity.

These "WHAT IF" questions and answers may sound like dreams of a distant future, but the truth is, they are within reach today with MPGA battery technology. This groundbreaking innovation surpasses the capabilities of conventional Lithium-lon batteries, offering unmatched capacity and performance.

By exploring the possibilities of MPGA battery technology, we are actively shaping a future where our imaginations become a reality. Join us on this exciting journey as we unlock the true potential of batteries, paving the way for a greener, more efficient, and sustainable tomorrow.

With MPGA battery, the future is not just a vision but a tangible reality that is transforming industries today.

Get ready to embark on a journey of innovation, where the boundaries of performance and capacity are pushed beyond limits.



Realizing a Future of Limitless Possibilities Today, Unveiling Present Realities!

# UNLEASHING

### YOUR BOUNDLESS IMAGINATION

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# UNLEASHING YOUR BOUNDLESS IMAGINATION



### THE FUTURE OF ELECTRIC VEHICLES (EV)

**What if... EVs traveled up to 3 times farther** than Lithium-Ion battery, enabling extended road trips, **eliminating frequent recharging**, and ensuring **zero explosion** for maximum safety?

**What if...** Charging took less than 8 minutes, revolutionizing electric vehicle refueling for efficient and convenient travel?

**What if... EVs had a lifespan of up to 1,400% longer**, delivering enhanced power performance and an unmatched driving experience?

**What if...** Environmentally friendly and biodegradable batteries set new standards for sustainable energy transport at half the cost?

What if... Limitless innovation reshaped transportation and environmental conservation?



### FROM AIRPLANE TO THE FUTURE AIR TAXI INDUSTRIES

What if... Air Transportations revolutionized air travel with enhanced performance, efficiency, and environmental sustainability? With a 0% explosion rate, 100% eco-friendliness, and up to 400% more energy output, they would propel urban transportation into a new era of safety and efficiency.

**What if...** Air Transportations could be recharged faster using groundbreaking battery technology, minimizing downtime, increasing flight frequency, and delivering expedited journeys for passengers?

What if... Air Transportations embraced the potential of the new battery with up to 10 times longer life than any existing batteries introducing enhanced flight performance, ensuring a safer and more secure journey for passengers and crew, cost savings, improved

revolutionizing the aviation industry?

What if... Limitless innovation reshaped transporta-

sustainability, and enhanced reliability,

tion and environmental conservation?





### **UNLEASHING**

YOUR BOUNDLESS IMAGINATION



### THE POTENTIAL FOR ENERGY STORAGE SYSTEMS

**What if... ESS ensured unshakable power reliability**, transforming how we experience electricity and providing an uninterrupted energy supply for homes and businesses?

**What if... ESS expanded to a vast 10m²**, unlocking unparalleled energy storage capacity for diverse applications, from communities to industries?

**What if...** ESS seamlessly integrated with renewable energy sources, becoming the linchpin of a sustainable future, maximizing clean energy potential?

**What if...** ESS innovation knew no bounds, revolutionizing power utilization for a greener, more efficient world?



### **EXPLORE THE MILITARY'S ADVANCEMENTS:**

**What if... Military operations harnessed the enduring power of these batteries**, enabling extended missions and enhancing operational effectiveness on the battlefield?

**What if...** Military equipment became **significantly lighter and more compact up to 40%**, increasing agility, mobility, and strategic flexibility for tanks, aircraft, and weaponry?

**What if... Military bases became self-sufficient**, relying solely on cutting-edge energy storage systems for power generation, enhancing security, and ensuring seamless operations in any environment?

What if... These innovations revolutionized military strategies, leading to unprecedented tactical advancements, operational efficiency, and global security, making our armed forces more agile, sustainable, and capable?





### **UNLEASHING**





### PICTURE A TRANSFORMED HOUSEHOLD

**What if...** Your home could be powered by eco-friendly biodegradable batteries, providing a **limitless sustainable, revolutionizing energy use**, and creating a responsible future?

**What if...** You could **drastically cut expenses by up to 90**% and reduce your environmental footprint?

**What if...** Homes embraced intelligent energy management, seamlessly blending technology and conservation, conserving energy and shaping a sustainable world?

**What if...** This vision became the norm, transforming houses into **efficient, eco-conscious havens**, and setting new standards for the future?



### REIMAGINE THE WORLD OF MOBILE DEVICES

**What if... Mobile devices lasted up to 3 times longer**, providing uninterrupted connectivity and usage for days or even weeks on a single charge, revolutionizing productivity, communication, and entertainment?

**What if...** Batteries delivered **400% more energy output**, unlocking a new era of mobile devices with advanced features, lightning-fast processing, and innovative functionalities, all powered by a revolutionary green energy source?

**What if...** Batteries had a lifespan of over 10 years with **minimal degradation**, maintaining their performance and capacity without significant health decline, leading to reduced waste and longer-lasting electronic devices?





## UNLEASHING YOUR BOUNDLESS IMAGINATION



### **ENVISION A SUSTAINABLE SHIPPING INDUSTRY**

**What if...** Cargo ships could traverse the seas for weeks, powered by sustainable energy sources, eliminating the need for frequent refueling? Picture a flourishing trade industry, exploration of vast oceans, and a future of maritime sustainability.

**What if...** The reduction in battery weight and volume transformed cargo ships, allowing them to carry larger loads and sail longer distances? Envision increased cargo capacity, energy efficiency, and reduced emissions, preserving our oceans for generations.

What if... Maritime routes became the epitome of eco-friendly transportation, harmonizing commerce and conservation? Imagine a world where sustainable shipping is a reality, transforming the industry and inspiring economic growth alongside environmental preservation.



### PICTURE THE TRANSFORMATION OF MEDICAL DEVICES

**What if... Life-saving medical devices had extended runtime?** With batteries that last 4 to 10 times longer, medical professionals could rely on these devices for extended periods without the need for frequent recharging or battery replacements. How would this impact patient care, especially in critical situations where time is of the essence?

What if... The increased energy output of these batteries enhanced efficiency in saving lives? With optimal power and endurance, medical equipment could function at peak performance, ensuring efficient and effective life-saving interventions. How would this boost the confidence of medical professionals and improve patient outcomes?

What if... The reduced weight and volume of the batteries opened new horizons in health-care? How would portable medical devices designed for remote areas and emergency situations change the way healthcare is provided?



# UNLEASHING YOUR BOUNDLESS IMAGINATION



### REIMAGINE THE CONSTRUCTION INDUSTRY

**What if...** Construction sites operated independently of the national grid, using quiet and efficient battery-powered machinery instead of generators, transforming urban landscapes with sustainable building practices and reducing noise and air pollution?

**What if...** Construction vehicles achieved **greater efficiency and extended operation times** through advanced batteries? Imagine bulldozers, cranes, and excavators seamlessly powered by cutting-edge technology, setting new standards for efficiency and longevity in the construction industry.

**What if...** Construction became synonymous with environmental stewardship? Envision a world where every building represents architectural brilliance and ecological responsibility, transforming skylines into symbols of progress, innovation, and environmental consciousness.



### **AUTOMATIC SELF-RECHARGING SYSTEM**

What if... The automatic battery recharging system could wirelessly charge electric vehicles while they are in motion?

**What if...** The automatic battery recharging system could be **integrated into existing infrastructure**, such as Off-grid Applications, Emergency Power Backup, or Remote Monitoring Stations?

**What if...** The automatic battery recharging system could be implemented on a global scale, creating a standardized charging infrastructure?

What if... The automatic battery recharging system seamlessly integrates with various transportation vehicles like buses, trains, drones, airplanes, ships, and other major modes of transport, while also providing limitless power to electronic appliances through an advanced MPGA battery, ensuring high-performance and continuous operation?





### NOW, IMAGINE if all the imaginations became a reality today.



- We had an infinite supply of battery ingredients from the abundant natural resources, such as palm oil, can empower us to bring these revolutionary ideas to life.?
- Our batteries exhibited exceptional low and high-temperature tolerance, with zero explosion hazards, high energy density, and a lifespan 10 times longer than Li-lon batteries?
- Our batteries were not only **100% eco-friendly** but also **biodegradable** and **harmless to both humans and animals**?
- Our batteries exhibited high charge/discharge efficiency, maximizing their performance capabilities?
- There were no size limitations in battery production, fostering innovation and customization?
- We achieved miniaturization, shape variation, and free deformation of batteries, providing unparalleled flexibility and adaptability?
- Our batteries utilized a hard-gel formation, ensuring unparalleled stability and durability?
- We could **reduce the cost to less than 50% of Lithium-Ion batteries**, making them more affordable and accessible?
- We could expedite battery production by streamlining manufacturing procedures by over
   50%, resulting in faster and more efficient production?
- The Battery manufacturing required **less space**,due to the reduced manufacturing process enabling more streamlined operations?
- The manufacturers could enjoy **reduced costs associated with producing** the battery?
- Maintaining these batteries was incredibly easy, simplifying the user experience?

#### The answer to all the WHAT IF above is YES, these scenarios are not mere dreams of a distant future.

They are tangible realities available now, made possible by the transformative power of MPGA battery technology. Embracing this innovation goes beyond mere revolution; it heralds an epoch of unprecedented sustainability and efficiency, making monumental strides toward advancing the global energy transition and electrification. By joining us, you become an architect of this extraordinary future, actively shaping a world where innovation paves the way for a greener, more efficient, and sustainable tomorrow.

Together, let's embark on this groundbreaking journey today.





### What is MPGA BATTERY?

**MPGA** (Methylated Poly Glycolic Acid) battery is a revolutionary technology that is set to transform the battery industry. With its exceptional features such as zero explosion hazard rate, high energy density, and long lifespan, it is expected to become the battery of choice for many applications, ranging from consumer electronics to aerospace and automotive industries.

The miniaturization and free deformation capability of MPGA batteries make them suitable for a wide range of applications and offer a high level of flexibility and adaptability. Furthermore, the fact that they are 100% eco-friendly, biodegradable, and harmless to humans and animals, makes them an ideal choice for sustainable and environmentally conscious applications. In summary, the MPGA batteries are poised to disrupt the battery industry and usher in a new era of safe, high-performance, and sustainable energy storage solutions.

#### **APPLICABLE AREA**

**Electric Vehicles** 

Drones

**Power Grid Connection** 

ESS (Energy Storage System)

Solar Streetlight

**UPS Backup Power** 

**Electric Boats/ Ships** 

Communication-Based Stations

Solar/Wind Energy Storage

Cellular Phones/Watches

Search and Rescue

**Electric Scooter** 

Caravan / Camper

Various Home Appliances

More with no limits or boundaries!

U%

**Explosion Rate** 

Excellent Low and High-

**Weight/Volume Reduction** 

MPGA Battery: Less than 200 kg

100%

**Eco-Friendly** 

Biodegradable, Harmless to Humans and Animals.

**50**%

**Less Cost** 

The Production Cost is Less than Lithium-Ion

**25**%

**Less Charging Speed** 

Fastest Charging Speed in the Industry

400%

**Energy Output** 

Lithium-Ion Battery: 560 km MPGA Battery: 1,368 km 10 m<sup>2</sup>

**No Shape Limitation** 

From Micro-mini Battery to the Maximum size up to 10X10 m

1400%

**Longer Life** 

Li-Ion Battery: 1,500 cycles MPGA Battery: 20,000+ cycles

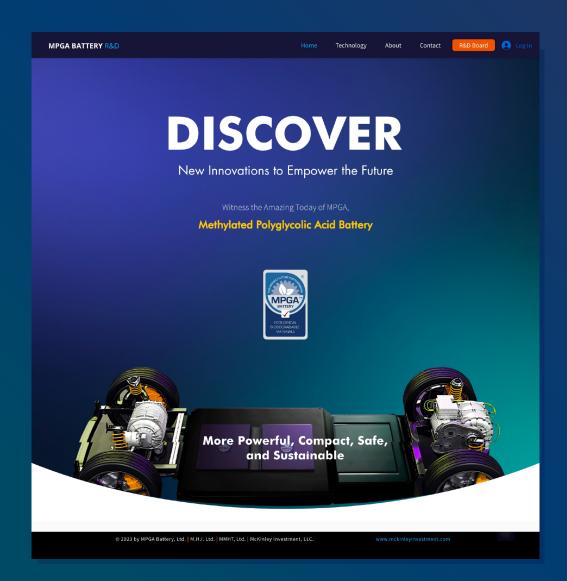
#### **INTERESTING FACTS**

- Our regenerative green technology harnesses Polyglycolic Acid (PGA) extracted from palm oil for sustainable energy solutions.
- PGA material is 100% biodegradable and will remain abundant for several decades.
- The battery production capacity is virtually limitless.
- Developed by leading scientists in Japan, this technology represents a breakthrough in the energy sector.
- With just 5% of palm oil production in Thailand, we can produce 100GWh of Battery Capacity per year using MPGA Battery.
- Our production capacity is set to grow significantly in the future to meet increasing demand.



### To see more about **MPGA BATTERY** please visit our homepage

### www.MPGABattery.com



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