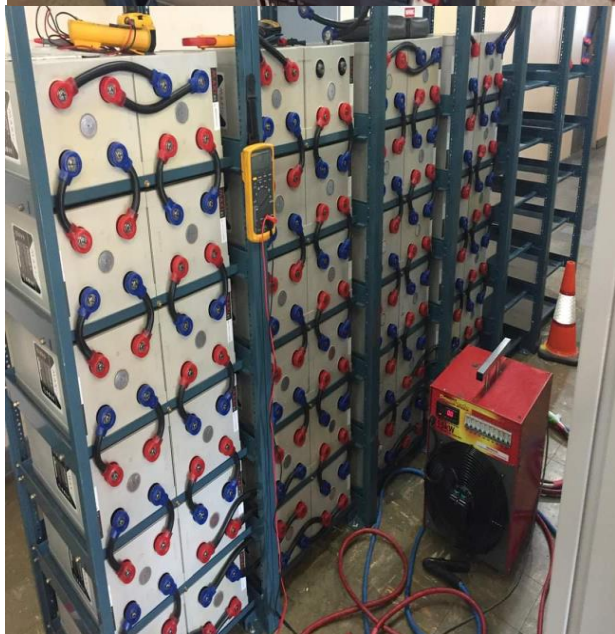
Receipt :

Proposer : MAXI BS

Proposal of Rejuvenating UPS Batteries

01. NOV. 2025



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The way the MAXIbs Korea walked

Company Name	MAXIbs Korea co., ltd.
Biz. Area	UPS Battery Rejuvenation Service & Equipment
Overseas coporation	(Australia) MAXIBS. Aus. & (Philippines) Philippines: MAXI BATT.
	Company history
May. 2008	UPS Battery Rejuvenation Equipment and Technology Development
	The technology was recognized by KT,SK and LG Telecom for their UPS battery rejuvenation demo between May 2008 and December 2010
Feb. 2011.	Successful UPS battery Rejuvenation demo on Telstra, Australia's 1st telecom.
31th. Jul. 2020.	KERI(Korea Electro technology Research & Institute) Discharging Test Battery 100% Rejuvenation Certificate achievement
	(Request: UPS battery in Seoul Transportation Corporation)
20th. Jun. 2012.	Establishment of MAXI BS Australia (Gold Coast)
14th. Feb. 2014.	Yield Test contract with Telstra
Feb. 2014.	Official delivery start (Actually, battery aging test to start and rejuvenate delivery after 2011 demo success)
2011 - Mar. 2018	Passing the Aging Test – Telstra delivery.
Jun. 2016.	Philippine BETA FOAM Company Exploring Battery Rejuvenation Plant, Australia.
22th. Jun. 2016.	Philippine Manila Capital Stock 500,000 USD JV(joint Venture) MAXI BATT Foundation.
30th. Sep. 2017.	Moved into KIST Technology Venture after rigorous technology verification at Korea Technology Venture in KIST.
12th. Dec. 2017.	Transition to MAXIbs Korea Co., Ltd.
2017 - 2018.	I.C.C.R. System (Individual Cell Control Rejuvenation) Development completion & Relay Style Discharger Solar Inverter finishing the development
11th. May. 2018.	Patent acquisition of Rejuvenation Equipment (Patent No. 10-1859336) Patent acquisition of Rejuvenation Technology (Patent No. 10-1859176)
Oct. 2018	Vietnam IR
18th. Nov. 2019.	Acquired Certificate of Technical Achievement from D&B (Dun & Bradstreet), a global technology verification agency.
Sep. 2020	Recommended to KT headquarters after verification by Kt Commerce quality control team.
	Presentation will be conducted with KT's quality management team at KT's Gwanghwamun headquarters and Bundang headquarters on October
	KT waste UPS battery rejuvenation test conducted by KT quality management team on November 5, 2020 (start).
Jan. 2021.	KT's waste UPS battery rejuvenation test was conducted by KT technical team maestros for 6 months (starting).
15th. Apr. 2021	Six months of testing completed a complete rejuvenation test verification by battery capacity and type.
	Installation completed at each base station company such as Suwon in operation.
May. 2021.	KT company registration.
Jun. 2023.	As of 28 months after completion of installation, it is being used without any problems.
30th May. 2023.	KERI(Korea Electro technology Research & Institute) Discharging Test Battery100% Rejuvenation Certificate
	(Request: UPS Battery in Seoul Transportation Corporation)

Related laws and policy directions

21C, Eco-friendly Challenges in Advanced Countries "Government, Inter-Business waste Recycling"

■ Basic Act on Resource Circulation Article 3

All members of society,
including the state, local governments, business operators,
and citizens shall follow the following principles to promote
the transition to a resources circulation society.
1. To minimize the generation of waste as much as possible through the efficient use of resources
2. When waste generation is expected, the ease and harmfulness of recycling and disposal of waste are considered what to do.
3. The generated waste shall be recycled or disposed of to the extent possible technically and economically in accordance with the following principles.

■ Basic Act on Resource Circulation Article 6
(Responsibility of Business operators)

A business operators shall reduce the generation of waste by efficiently injecting resources and using energy and improving processes, materials, structures, etc. to prevent products, materials, containers from becoming waste

Environment

Resource circulation

■ CHAPTER II
FACILITATION OF SAVING AND RECYCLING OF RESOURCES

Article 8 (Saving of Resources)

The Government may recommend matters necessary for the saving of resources,
control of generation of wastes and recycling of wastes to producers and consumers or guide them

Increasing the demands of the times for the low-carbon and eco-friendly economy and expanding smart green cities by promoting the Korean version of the New Deal comprehensive plan.

"Accelerate to convert ESG(Environment, Social, Governance) "

산업용 배터리 재활용 추진배경
Background of recycling of industrial batteries

01 Environmental exposure of sulfuric acid and heavy metals due to unauthorized disposal of waste batteries

The volume of waste batteries has increased dramatically at home and abroad – Lack of disposal facilities and lack of environmental management policies

- Environmental pollution is serious due to greenhouse gases generated during the disposal of lead and sulfuric acid.

02 Indiscriminate trending of new unproven batteries

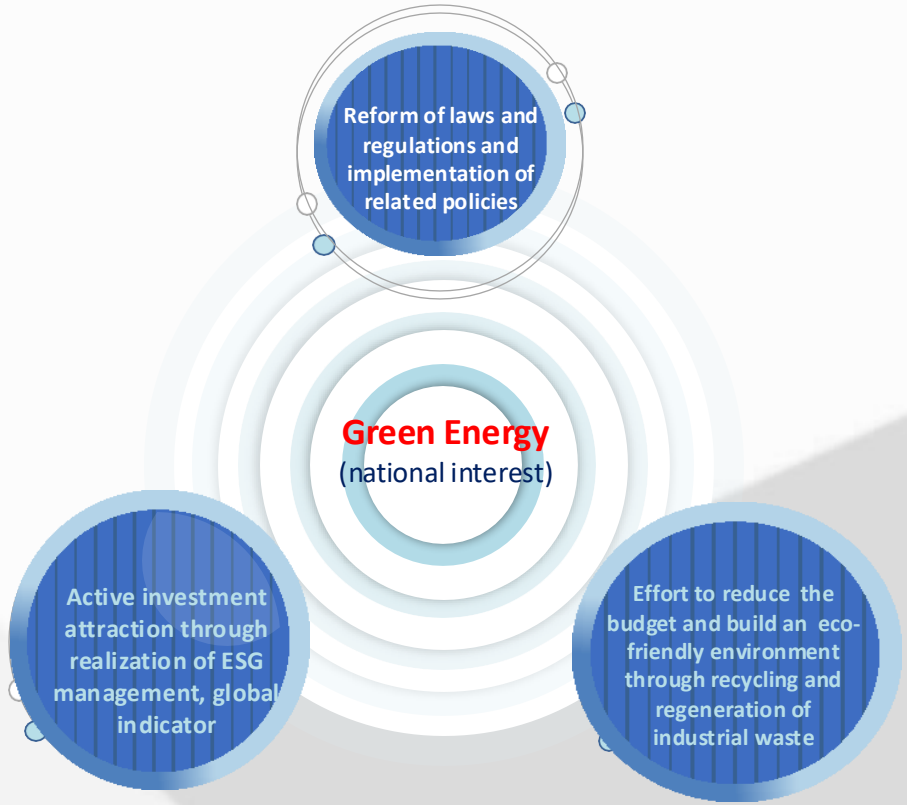
- Avoid blindly trending lithium batteries that have not yet been verified.

03 Lack of R&D and policy support for recycling and recycling lead batteries

- 160 years of proven R&D support to maximize the economics and safety of lead batteries.

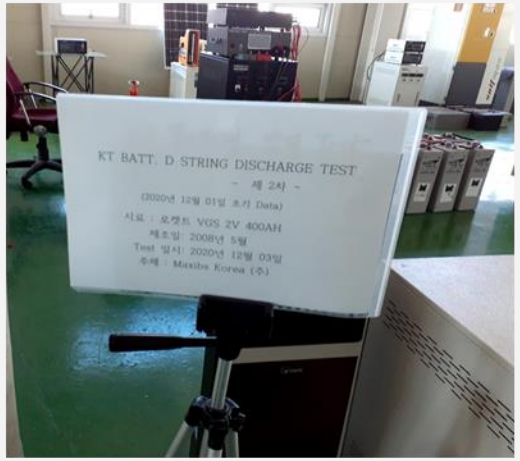
Lack of policy support

국익을 위한 Green Energy 추진 방안
Green Energy Promotion Plan for National interest



KT Test Runs – in Korea

KT 시험_방전테스트운영



KT 분기국설치현황

Causes of battery performance degradation

Power generation process

Lead-acid batteries basically gene rate electricity by the chemical re action of lead and sulfuric acid

Performance degradation due to corrosion of lead and sulfate penetration

Balance of each cell

Evebn if equal charging is performed regularly, the balance between cells will be broken if the battery is used for a long time

SOC(State of Cell)
Condition defecr occurs

100% of battery cannot be fully charged

"Battery Rejuvenation" refers to a battery that has been used for a long time and has become impossible to fully charge.

'Restoring' it so it can be used again using battery regeneration technology.

'Rejuvenate' refers to more than 95% of new batteries as "Recovery of Power and Life Cycle"

Battery regeneration restore technology overview

▷ There are some companies that play UPS battery in Korea, but they are very poor at the technology and equipment.
Generally, through desulfurization in the battery with a high-frequency or low-frequency pulse Charger, current and voltage control are performed.
Restores battery continuity with poor electricity flow.

However, the battery's(state of cell), which does not fully charge when charging due to the continuous unstable electricity flow a long time.
Restoring (SIC) to a new battery level is a very difficult task and requires advanced technology.

In particular, it is a battery expert that the equipment itself recovers the battery condition and recovers close to the new one.
They think it's definitely impossible.

As soon as the cells are connected to each other for charging and powered on, each cell interacts with each other and interacts with neighboring cells
The data interrupts full-charging, and the interactions is very complicated.

MAXIbs Korea is a solution to this, and it closely watches individual cells throughout the charge and discharge process for a long time, and the charge and discharge obtained therefrom.
Analyze the data in detail and pinpoint a kind of identity for individual cells **(I.C.C.R. System)**

▷ Accordingly, the rejuvenation program is applied differently for each cell to perform rejuvenation and playback.
The development of all these processes, processes, and equipment appropriate to to processes, is achieved over a number of experiences and a long period of time.

Q.C.(quality control) for restored batteries is also very important.
The battery that has been restored may not have a problem when it is gently discharged by the discharge rule, but it cannot withstand it during real-time discharge and is immediately dropped.

Therefore, the restoration battery requires that the discharge experiment is as important as the rejuvenation process.

UPS battery is used in an emergency, and the company's accurate rejuvenation technology and strict screening of results are also international.
Requires through reference verification by Major Telcom.

In this regard, the perception of Korean regeneration companies in Major Telecom in Korea is very negative

Technology holdings company – MAXIbs Korea

▷ MAXIbs is a company that supplies equipment and technology to restore waste batteries that are discarded at the end of their lives.

▷MAXIbs Korea mainly restores UPS batteries
UPS battery is uninterruptible power supply that supplies power immediately when power is lost.
Rejuvenation here means recovery of more than 95% of the power and life cycle of a new battery.

▷MAXIbs Korea is provide “Telstra” with batteries rejuvenated by the company over the past 7 years.
“Telstra” is managed by a leading engineering and Global BMS company for battery.
MAXIbs has passed the presentation with them and is delivering them to MAXIbs Brand.

▷This proves that MAXIbs Korea is a global rejuvenation battery company.

Rejuvenation Technology I.C.C.R.SYSTEM

▷Battery inspection capability for rejuvenation : The only battery analysis equipment in the world developed by itself.

Desulfurization technology according to desulfurization equipment and its operation : Remove fine sulfuric acid without damaging the electrode plate in the battery (use high-frequency or low-frequency pulse depending on cell condition).

Individual analysis for each cell obtained by observing charging and discharging : a kind of identity analysis for each cell by closely monitoring the resistance value of each cell and the interaction between cells during charging.

Run a restore program based on data for each cell.
At the time, high-frequency pulse restoration equipment are selected, and this equipment also has 1-phase and 3-phase equipment, so the equipment is used differently depending on cell condition.
This equipment controls voltage, current, and time intervals to penetrate the blocked electricity flow in the battery, which requires very high-level techniques.

This is MAXIbs Korea's know-how.
When continuity is restored, discharge is performed with full D.O.D.(depth of discharge) to check the degree of recovery compared to the new product.

▷After analyzing the recovered data , 24 cells are delicately organized into groups, and then connected in series to apply the full charging (string) cell combination in equal charging mode according to the arrangement principle.

At this time, the balancing work between cells is performed again , and the difference between cells is minimized, the balance is balanced, and through this work, the fine parts of the cells are restored, Revert to new levels

That is, 1 string of 24 cells - 48V is recovered to SOC greater than 95% of the new product , and there is little voltage difference between each cell during charging and discharging.

The core of rejuvenation technology is the continuity recovery technology close to new individual cells and the balancing technology between battery cells.

If none of this is lacking, perfect regeneration is impossible.
The decline in battery results in a vicious cycle of over-charging and over-discharging as the balance between cells collapses, full charging does not occur.

MAXIbs Korea enables perfect battery rejuvenation based on the world's best cell balance technology.

Replay Rejuvenate Process

95%+ Power and Life Cycle Recovery

MAXIbs Korea's patented technology ensures the best battery performance

According to KS C8518 regulations, 95% or more is considered to be a new product.

Current Flow Recovery

Using ICCR(Individual cell control Rejuvenation)System current flow recovery

Separation and Rejuvenation

By reconfirming the status of individual cells, Best State of Health (SOH) for each cell Play as is

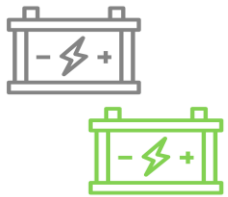
Cell Balancing

Cell-to-cell using self-developed equipment
Balancing job completes playback job

Complete playback restoration of individual cells with a specialized ICCR system

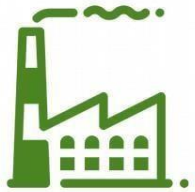
MAXIbs Korea's patented equipment and special technology ensure the perfect performance of waste batteries in the new product condition.

From pick-up To recycled battery delivery



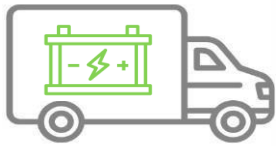
a waste battery Pick-up / Import Inspection

- Waste battery on-site collection and Factory Import Inspection (IQC)



a waste battery Restore/forwarding inspection

IQC Passed Waste Battery > Restoration Work > Shipment Inspection (OQC)



recycling of finished battery customer delivery

- Each history according to customer order Quantity Delivery and Delivery

Battery report provide

- With / Customer Battery Provide Performance Report

Continuous guarantee of customer's business & business when restoring waste batteries **Door to Door service** delivery ensures reliability with the same warranty period as new batteries

Introduction Effect

1)Battery Purchase/Service Costs

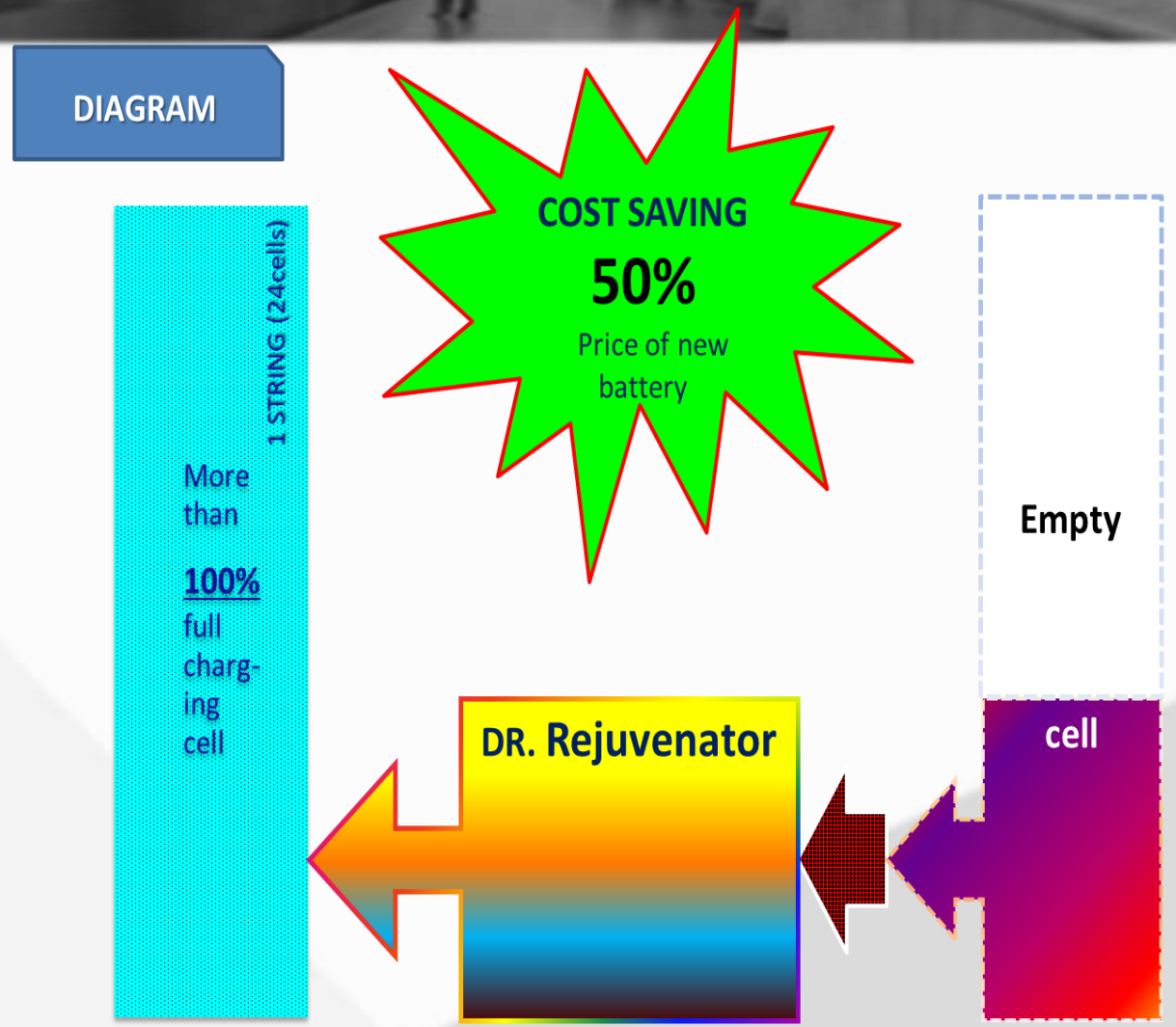
Purchase (goods) recycled batteries = Cost less than 50% compared to new purchases

(Service) Use of regenerative services = Approximately 35~45%

cost of new purchases (when customer provides spent batteries)

2)Budget savings expectations

Ensure life cycle and performance compared to new products



Business Target Areas

The rejuvenated batteries apply to UPS Systems where the facilities shown below are installed.

Health care
- Diagnostic system: X-ray, CT, Mri
- Clinical laboratory equipment
- Health care IT

Critical infrastructure
- Emergency lighting
- Security systems
- Fire alarm systems
- Building automation
- Point of Sales(POS)
- Smart farm

Electrical Substation

Banking & Finance
- Financial transactions
- Stock exchange
- Data centers

IDC(internet data centers), Server farms
- Servers(LAN, WAN...)
- Web prviders
- Data centers

Solar & Wind power generation

Industrial systems
- Process control
- FA(Factory Automation)
- PLC(programmable Logic Controller)

Transportation systems
- Air traffic control
- Railway signaling
- Tunnel lighting

Subway

Certificate of Technical Achievement · Patents · Record of Test Record · Equipments

01

02

03

04

Dischager

Full-Charger

Full-Charger

Rejuvenator(36V,48V)

Rejuvenator(6,8,12V)

Appreciate you

MAXIbs Korea