



**aeonus:** IMPLEMENTATION OF MOBILE ESS TO REPLACE DIESEL GENERATOR & A NEW ERA OF POWER LAST-MILE





Sustaining our planet

|               |   |   |               |
|---------------|---|---|---------------|
| Name          | aeonus, Co., Ltd  | Established   | Feb 04, 2020. |
| Business Area | <p><b>Products:</b> indego (power last mile), xEV battery pack</p> <p><b>CO2 solution :</b> RE100 solar energy subscription &amp; Carbon Neutral consulting</p> <p><b>Service:</b> engineering development related with battery packing</p> |   |               |
| Employee      | 25 (11 engineers)   |   |               |
| Contact       | <p><b>Phone</b> +82-31-8064-1277~8</p> <p><b>Fax</b> +82-331-8064-1279</p> <p><b>E-mail :</b> <a href="mailto:aeon@aeonus.co.kr">aeon@aeonus.co.kr</a></p>  |   |               |
| History       | 2020  | 02. First step to make the earth sustainable<br>04. Business Contract with BMW Group with respect to Reuse Battery.   |               |
|               | 2021  | 03. Approval of Special demonstration of Regulatory Sandbox<br>05. Minihydro MG project in Georgia Consulting(ADB)<br>07. MOU with Pakistanis' Zisolar for EV charging                          |               |
|               | 2022  | 05. Begin commercial service, indego 50<br>08. Established Corporation in North America<br>09. Installment of 3D CT NDT battery test machine<br>11. Business Discussion with EGAT from Thailand |               |



Groundbreaking ceremony for 8.25MW RE100 with ABInBev



aeonus R&D Center 1 (ESS System R&D)



3D CT Imaging Lab



aeonus Jeju R&D Center 2 (xEV republished battery diagnostic evaluation and BM demonstration )



Preproduction factory at Hwasung



Gunpo pilot production







**How do we supply electricity & reduce pollution?**



Diesel generator: noise/ fine dust/ GHG

indego: replacing diesel generator



Times are changing

Demand for replacing combustion generators



Demand for mobile EV charging



Demand for saving fuel cost



1. Mobile indego



Power output: 50kW  
Voltage output: 3phases 380V~440V  
7kW AC type1 or, 120kW CCS1  
Capacity: 164kWh

Quick moving ability



2. Package indego



Power output: 50kW / 250kW  
Voltage output: 3phases  
380V~440V  
Capacity: 253kWh / 422kWh

Large capacity



ENVIRONMENTAL



ECONOMICAL



Use Case : 10MWh generation

| Diesel Generator 10MWh                           | indego 10MWh   |
|--|--|
| Fuel Cost USD10,000@6,400L<br>CO2 emission 17toe | Charging Cost US\$500@5cents/kWh<br>Carbon Credit 12toe acquired |

Super savings at fuel cost and maintenance













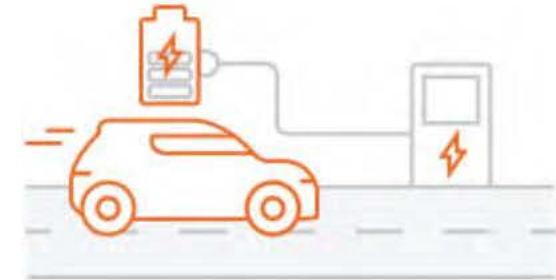








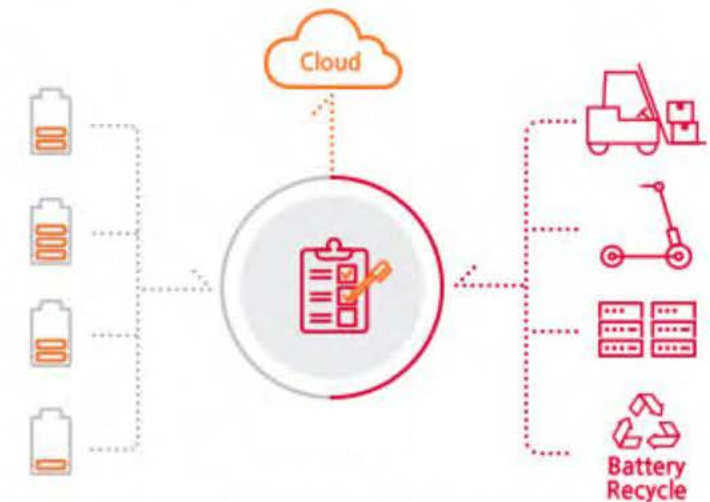
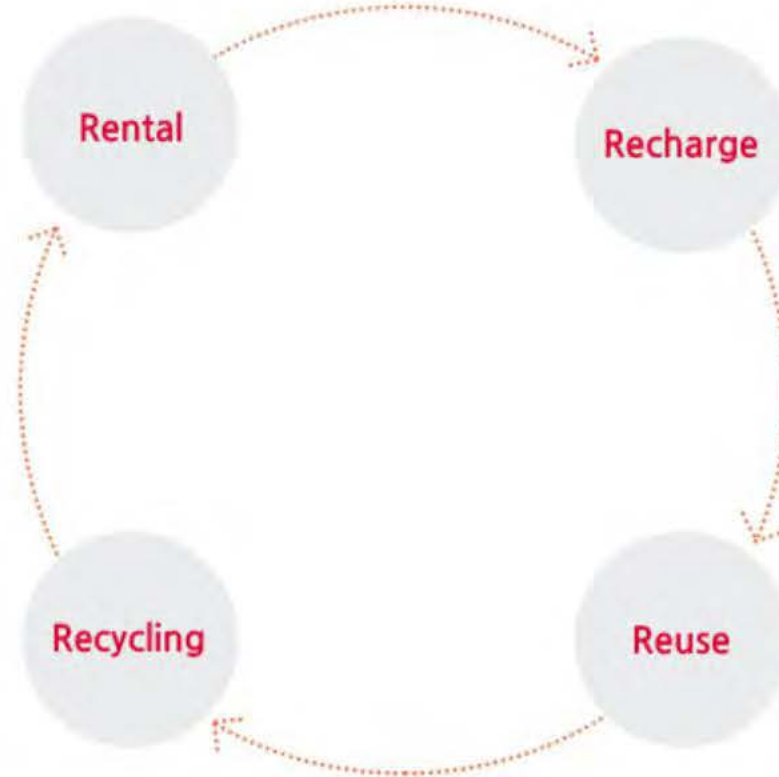
Cost Saving & Remote Monitoring



Life Span Protection



Evaluation & Categorized

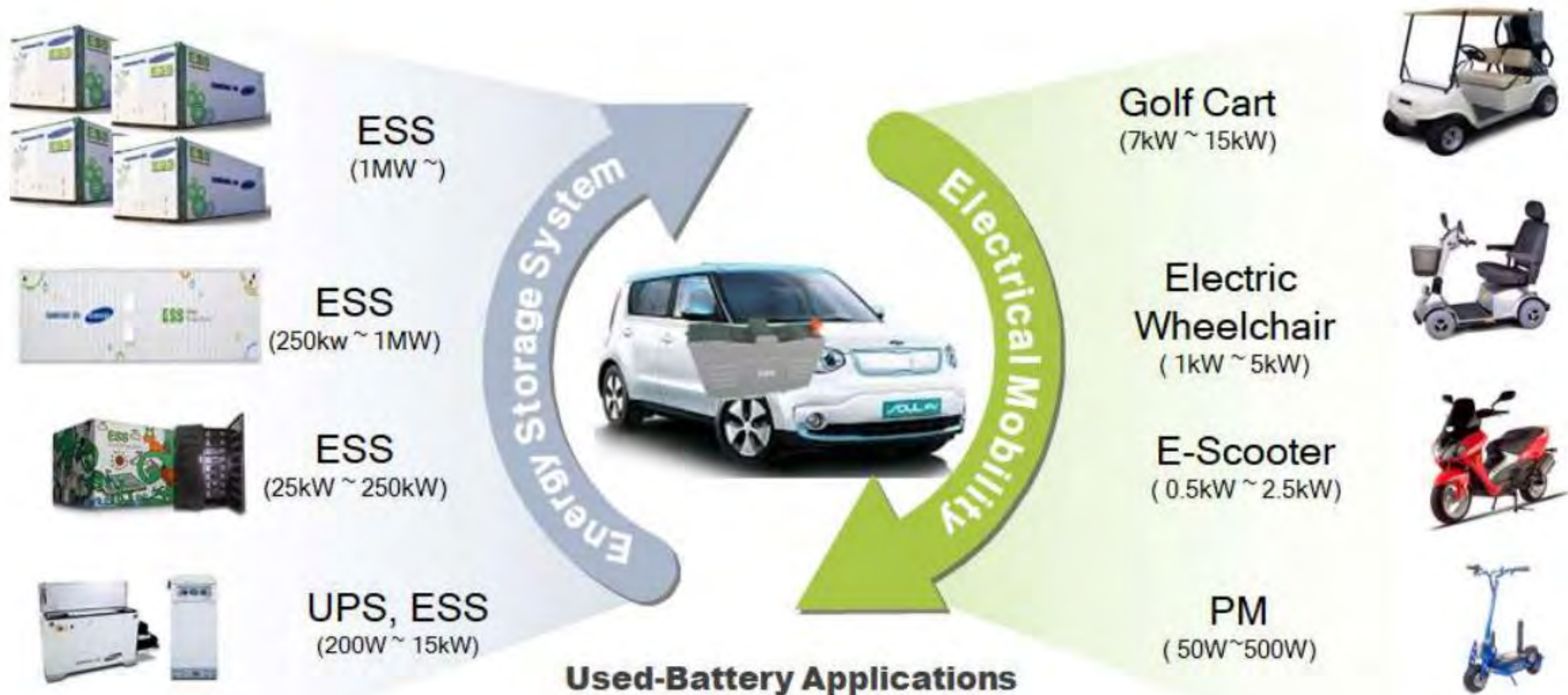


Battery Inspection & Usage Determination













Battery 2<sup>nd</sup> life

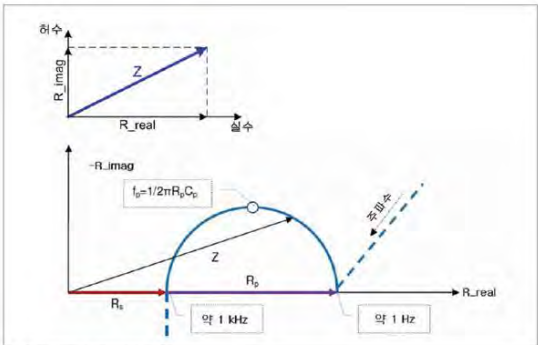


그림 3 | 주파수에 따른 임피던스(Nyquist Diagram)

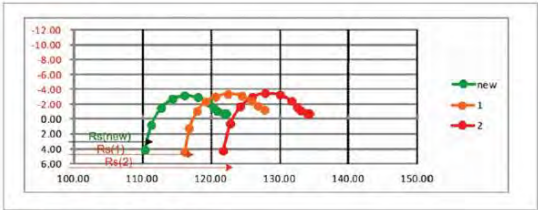


그림 4 | 노화상태가 다른 배터리의 임피던스

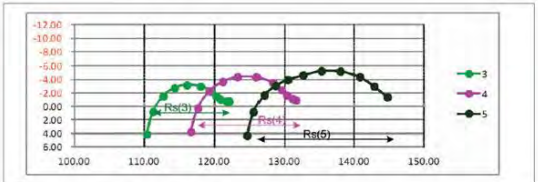


그림 5 | 충전상태가 다른 배터리의 임피던스

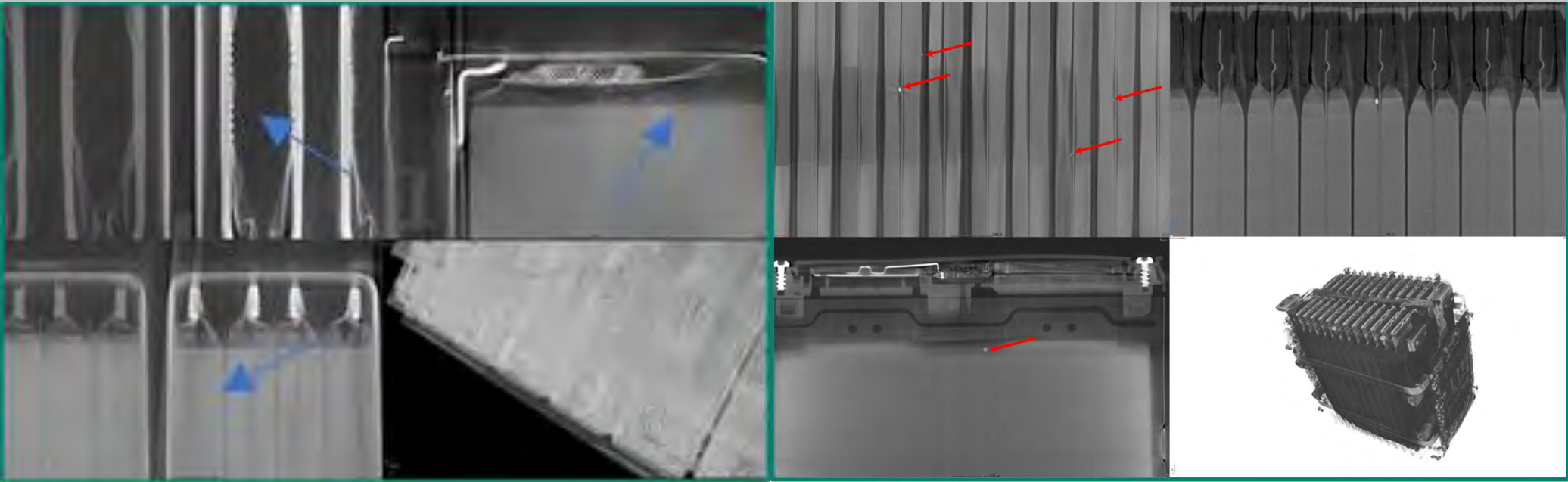
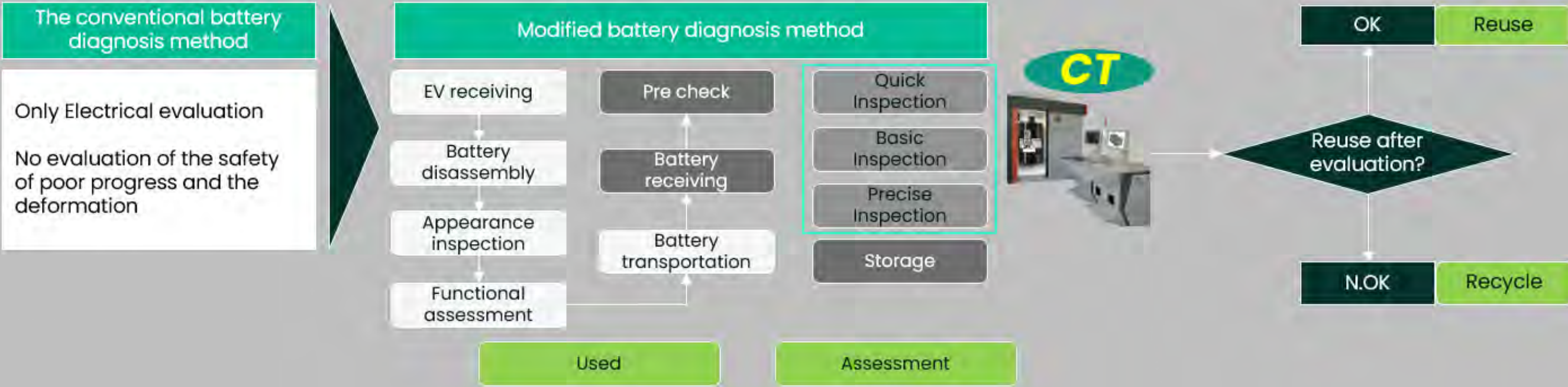
Categorized by diagnosing Spent Batteries

Inspection using Electric Test









### Test Categories

1. Welding, Sealing conditions
2. Electrode figures (Gap, fold)
3. Cracks, impurities
4. Overhang
5. Cell misalignment
6. Resin overflow
7. Gas pocket
8. etc.





**aeonus**

Sustaining our planet



