



SUSTAINABLE ENERGY INNOVATION: LITHIUM-ION AND SODIUM-ION BATTERIES FOR TOMORROW'S ENERGY

**THE BATTERY AND NEW ENERGY SCIENCE AND TECHNOLOGY FACTORY (kkUVOLT)
AT KHON KAEN UNIVERSITY**

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OUR TEAM



OUR MISSION SINCE 2010

REVOLUTIONIZE ENERGY, EMPOWER COMMUNITIES,
AND HEAL THE PLANET THROUGH **NEXT-GENERATION BATTERIES** AND **CLEAN ENERGY**
INNOVATION



OUR CORE TECHNOLOGY

Li-ion and Na-ion Batteries

Li-ion
battery

Nano Si-based anode for LIB from
rice husks and solar cells waste

Na-ion
battery

NVP cathode for NIB from rock
salt

18650 Li-ion Battery
Cells

Nanosilicon/Anode

Nanosilica

Rice Husks

Solar cells waste



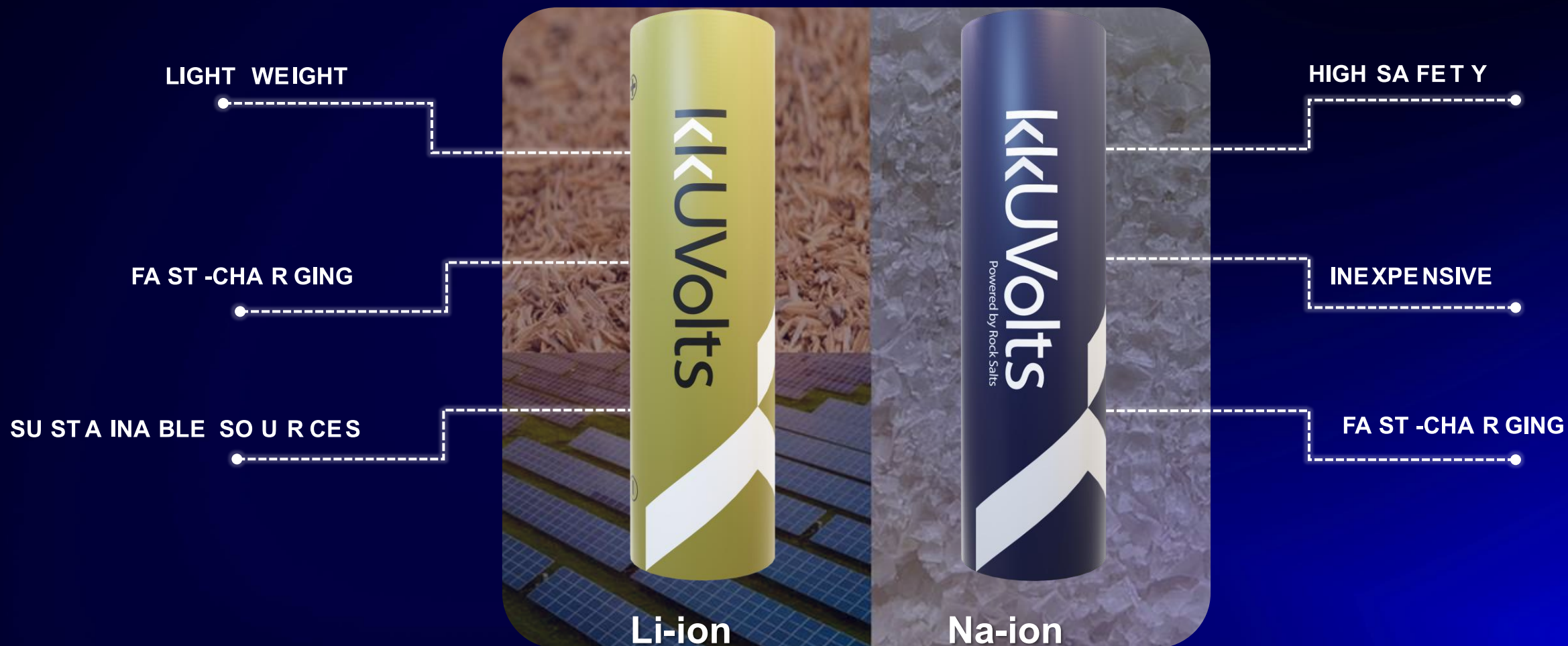
18650 Na-ion Battery Cells

Sodium Vanadium Phosphate
(NVP)

Rock Salt

LITHIUM-ION AND SODIUM-ION BATTERIES

FROM NATURE TO BATTERY



Li-ion

Na-ion

NA NO SI/GR/LFP OR NM C

HC/NVP

OUR JOURNEY

FROM RESEARCH TO INNOVATION: BATTERY PRODUCTION AND IMPLEMENTATION



OUR PRODUCTS

WE PROVIDE CUSTOMIZED ENERGY STORAGE SOLUTIONS THAT MEET GLOBAL STANDARDS



**MINI
POWER BANK**
CYLINDRICAL EV
GRADE
9.6 Wh



**SWAPPABLE
BATTERY PACK** FOR
ELECTRIC MOTORCYCLE
(UVOLT x Strom)
1.44 kWh



**CUSTOMIZED
BATTERY PACK**
FOR GOLF CART
(UVOLT x Beyond Green)
5 kWh



BESS
FOR HOME USAGE
5 kWh

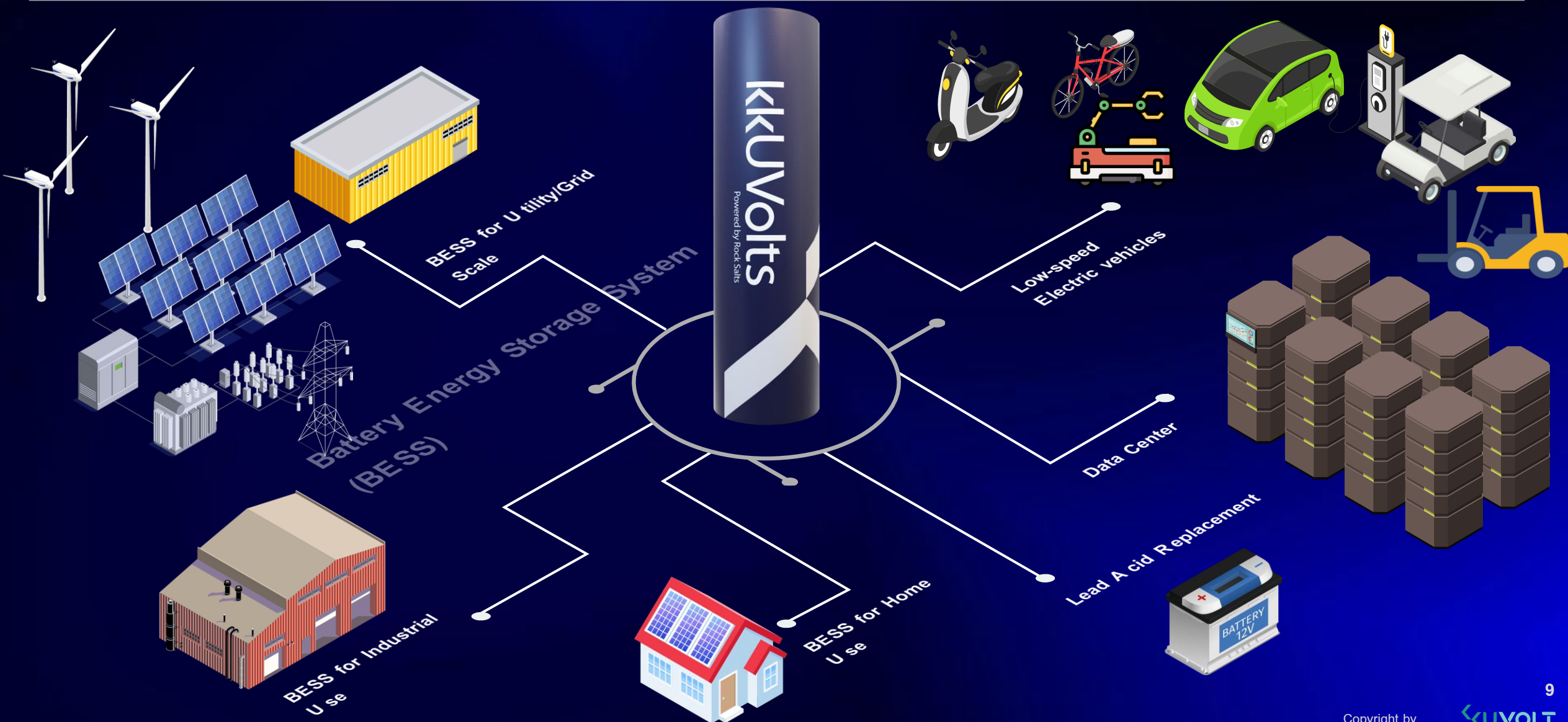


**MOVABLE
BESS**
FOR OUTDOOR
ACTIVITIES
5 kWh



STACKABLE BESS
FOR OFFICE USAGE
50 kWh

BEYOND CARS: SODIUM'S VERSATILITY ACROSS INDUSTRIES



U V O L T : L E A D I N G T H E S O D I U M B A T T E R Y R E V O L U T I O N

THAILAND RAW MATERIALS



ROCK SALT



HIGH PURITY
NaCl

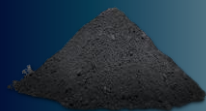


COCONUT SHELL



BIOCHAR

BATTERY MATERIALS



CATHODE MATERIALS SODIUM
VANADIUM PHOSPHATE (NVP)



ANODE MATERIALS
HARD CARBON
BIOCHAR

CELL & PACK PRODUCTION

BATTERY PACK
for Golf Cart



APPLICATIONS (MOBILITY AND BESS)



OUR SERVICES

UNLOCK THE FUTURE OF ENERGY WITH BATTERY RESEARCH, TESTING, AND EXPERT INSIGHTS

1

**R&D & PRODUCT
DEVELOPMENT**

2

**PERFORMANCE
AND SAFETY
TESTING &
CERTIFICATION**

3

**CONSULTANCY,
TRAINING AND
WORKSHOP**

THE GOLD STANDARD

OUR ACHIEVEMENTS



The winner of NIA award 2023
"Social and Environment"



WIIPA Grand Prize "Commercial Potential Award"
Kaohsiung International Invention & Design Expo 2022

10+

SEVERAL AWARDS
FROM INTERNATIONAL AND
NATIONAL COMPETITIONS

3

GRANTED PATENTS

20+

**FILED PATENTS AND
TRADE SECRET**

43

**INTERNATIONAL
PUBLICATIONS**

1

1st B.S. DEGREE IN BATTERY

6+

**NATIONAL
STANDARDIZATION**

4+

**INTERNATIONAL
STANDARDIZATION**

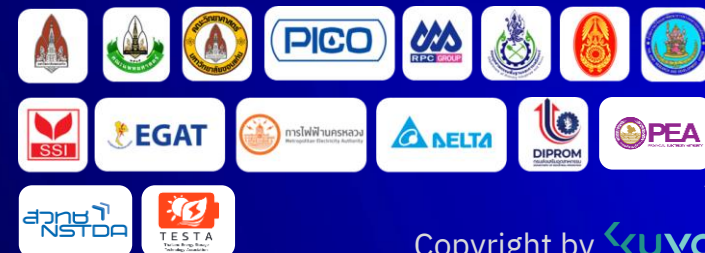
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OUR TRUSTED CUSTOMERS



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OUR PARTNERS





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Thank you for your attention



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