

#### **FAAM & SERI GROUP MILESTONES**



**SERI SPA:** Start-up as engineering group.



Introduction of engineering company specialist in recycle plants & technologic production processes.



Start-up in the production of plastic components.

2001-2002





Acquisition of production plants in molding of plastic accessories and boxes for batteries.

IMI FONDI CHIUSI entered in the corporate structure of SERI Industrial.

2010-2012



1999



1974

**FAAM** 

Start up in the production of premium starter batteries: Monterubbiano plant (Italy).

1986

**FAAM** 

Start-up in the production of premium motive power and stand-by batteries: Monte Sant'Angelo plant (Italy).

2000

**Lithium Battery** 

**R&D**: projecting of premium lithium battery solutions in all industrial applications.

2004

Start-up as first European assembler in the production of Lithium battery solutions in all industrial applications.



#### **FAAM & SERI GROUP MILESTONES**



Acquisition of plants in Spain and France ICS Exide Plastic Components activities.

2014



Acquisition of Ecopiombo smeller company completed by an upstream integration.

2015-2016



Entry in Italian stock exchange.

2017



Business lease by ICS in the production of plastic pipes and fittings. Disposal of non-core assets (former KRENERGY subsidiaries).

2019

2013

FAAM becomes part of SERI GROUP

2014

MP batteries: acquisition of Starter battery production: Nusco Plant (Italy). 2015-2016



Acquisition of Li-On R&D Company as European specialist in chemical, cell development and research of new active materials.

2017

#### LiOn CELL PRODUCTION:

Start-up project through takeover of the Teverola facility from **Whirlpool** corporation dedicated to the full automated manufacturing of European made cells and modules.

#### **JUJUY LITIO SA**

Joint venture with the Argentina Governments in the start-up of the extraction of lithium carbonate.

2019-2020

#### **TEVEROLA PLANT**

Start-up in the full automated production from **Li-ion** cells through modules and battery production.



#### **IPCEI EU project**

grants to FAAM
427 M€ for the
production of Li-ion cells
and the recycling of endlife Li-ion batteries.



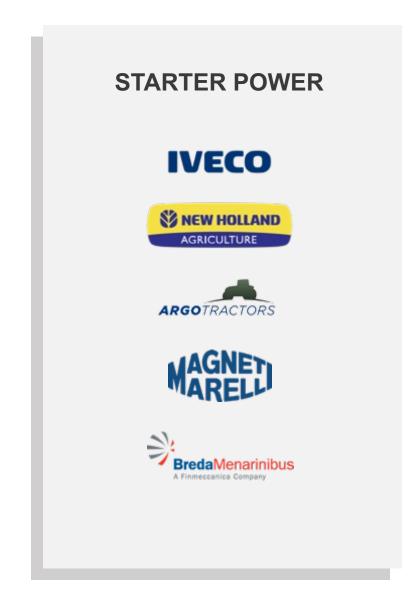
### **FAAM WORLD FOOTPRINT**



**JUYJUY** (ARGENTINA)



## SOME COMPANY REFERENCES 一些合作公司







#### SOME SPECIAL PROJECTS

#### **FAR SEAS**



In collaboration with the Italian Navy: Marina Militare Italiana and FINCANTIERI (FINMECCANICA) in the development and production of a full integrated Li-ion battery technology system including specific Battery Management System for submarines.

#### **MILITARY VEHICLE**



In partnership with the Italian Ministry of
Defense – Directorate of Terrestrial Armaments and IVECO Defence
Vehicle - in the development of lithium battery solutions dedicated to military vehicles.

#### **PUBLIC TRANSPORT**



Based on the previous experience in the city of Turin in 2008 together with GTT (public transport company), FAAM transform old vehicles equipped with lead-acid batteries, fueled with diesel, converting them to 100% electric vehicle using lithium solutions.

#### **SPECIFIC STORAGE**



For the mass production of large storage systems, from 30 kWh up to **1,7 MWh/container\***.

\*Other configuration are available



# 动力产品系列 MOTIVE POWER PRODUCT RANGE

先进的铅锂技术 Advanced lead & lithium technology











LITHIUM FECHNOLOGY



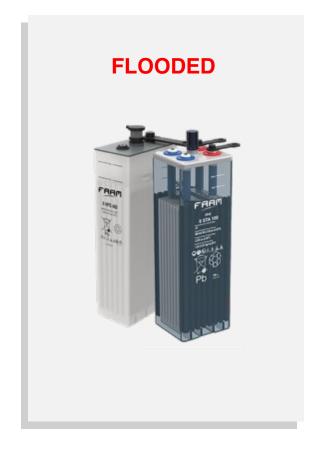
#### LITRACTION

- ✓ Lifecycles: > 4.000 cycles (DOD 80%)
- ✓ Energy saving: efficiency > 98 %
- ✓ Communication Interface
- ✓ High energy density

- ✓ Fast charging (up to 80% in 30 min)
- ✓ Meet IP54 protection
- ✓ From 80Ah to 1200 capacity range
- ✓ Plug and play
- ✓ Zero emission



## PRODUCT RANGE











# **LiHOME**

Residential Energy Storage



LiHome 10,24 kWh



LiHome 5,12 kWh



# STARTER POWER Energy, power, reliability...The triad that leads the way

#### PRODUCT RANGE

# HEAVY DUTY ENERGY TECHNOLOGY



- GENIUS PRO
- GENIUS
- SMART PRO
- SMART

# CAR POWER TECHNOLOGY



- CYCLES
- SAFE
- START

# HEAVY PLUS TECHNOLOGY



- MISTRAL
- TRALEG

#### MOTORCYCLES TECHNOLOGY



MOTORCYCLES



June 2006:

Start of the production at FAAM China



Focus on China's Market and Asia/Pacific



We aim to provide a better quality of Service



R&D

New product development



# FAAM China Team



















#### FAAM CHINA'S PROJECT LEAD ACID EX-PROOF

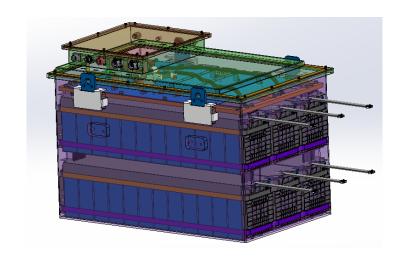








384 V 175AH











80 V 1150 AH







# BATTERY CLOUD SYSTEM 远程云管理系统

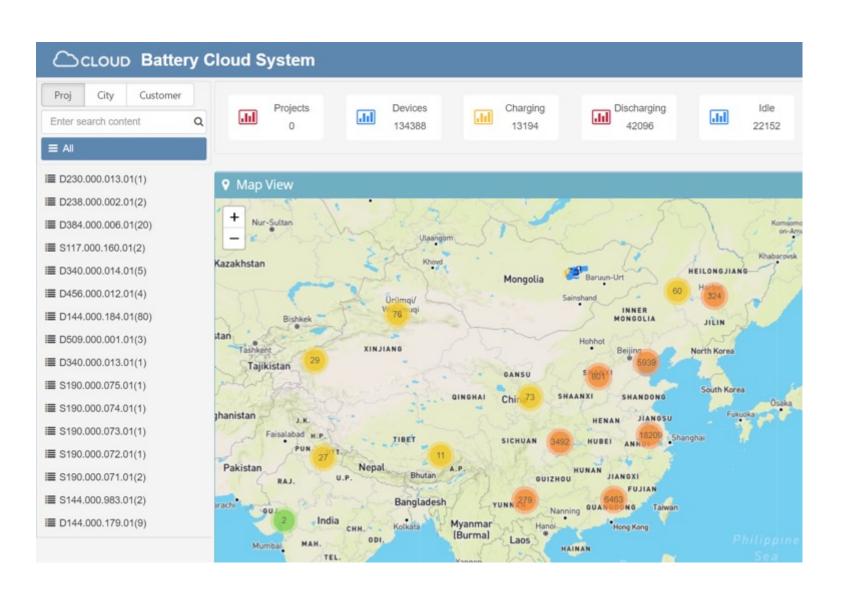


Figure 2: Battery cell production sites in Europe that are in planning, under construction or partly already in operation (i. o.).

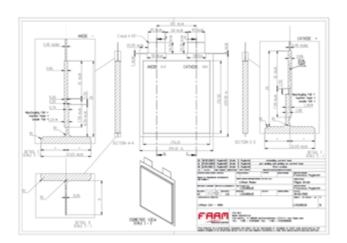
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### **Li-ION CELL**

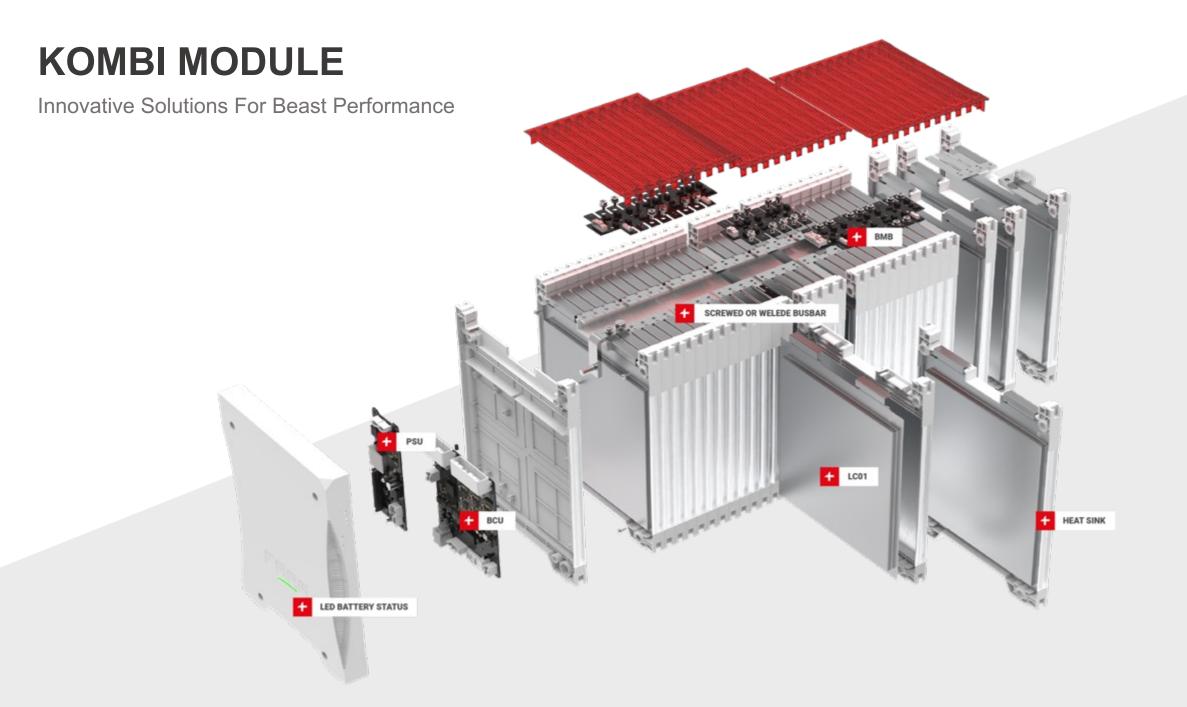
# Advanced Lithium Technology Key Features:

- ✓ 50 Ah / 160Wh pouch cell format
- ✓ 218 x 194 x 12.5 mm (L x W x t)
- ✓ LFP based (gen 1) 3.2 V nominal tension
- Low carbon footprint: water-based process, no organic solvent used
- ✓ More than 4.000 cycles (80% DOD)
- ✓ Max current in discharge 3C
- ✓ Max current in Charge 1C
- ✓ 20°C to 55°C operating temperature











## **STORAGE**

Since 2014

#### FIRST ITALIAN ESS

The plant, in operation since 2014, has brought innovation by integrating the energy storage from renewable sources to the electricity grid. Thus providing a strong energy efficiency solution, that is able to storage energy till 2 MWh.

#### Caratteristiche di ogni Shelter

•	Uscita di potenza	DC
•	Energia utile	500kWh
•	Tensione nominale	960Vdc
•	Tensione minima	750Vdc
•	Tensione massima	1050Vdc







# 宜兴法阿姆工业电池有限公司 Yixing FAAM Industrial Batteries Co., Ltd



← 在线客服: info@faam.com.cn



24小时服务热线: 0510-87600222



www.faam.com.cn



扫描二维码, 关注法阿姆电池























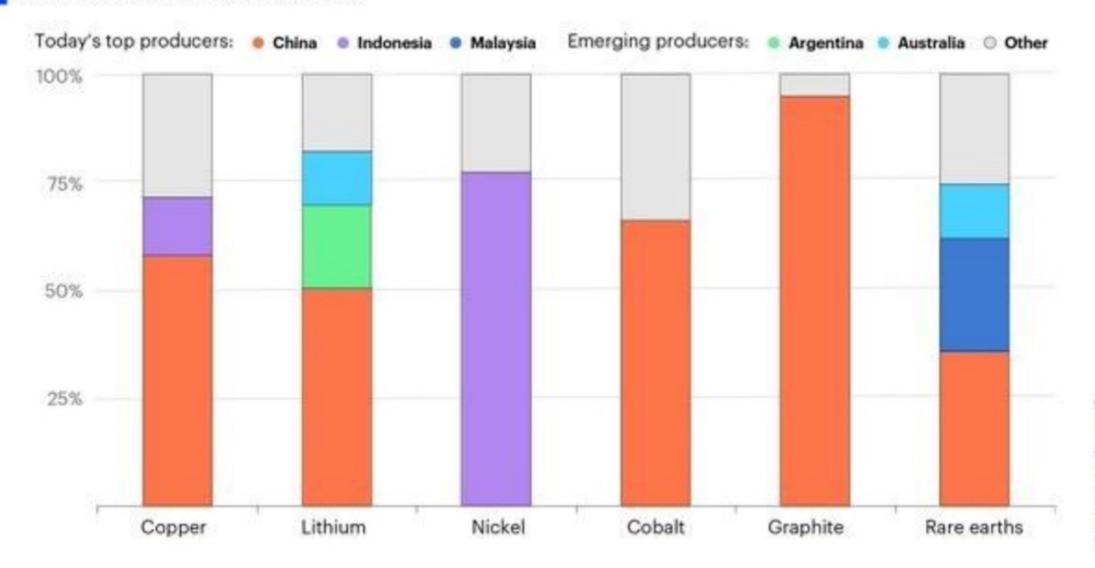






#### Sources of supply growth for refined minerals, 2023-2030

Global Critical Minerals Outlook 2024



International Energy Agency

#### **ACTUAL SITUATION (2023)**



Battery manufacturing reaches the Terawatt-hour-per-year era





1 TWh

52% were LFP batteries

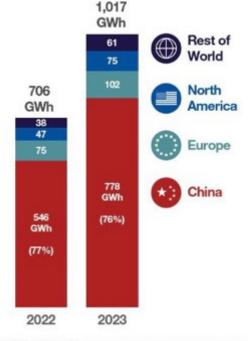
Top 3 manufacturers made up 3/4 of output











Source: CRU, national industry associations and manufacturer reports, verified against end-use demand data.

#### FORECAST (2028)

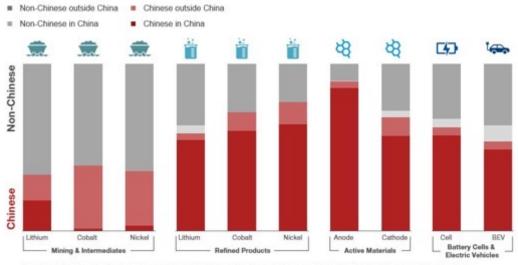




### Chinese equity ownership of lithium-ion battery supply chain projects extends far beyond its borders

Although China does not have significant geological deposits of battery raw materials, it has invested in processing capacity at home and overseas.

Battery supply chain production by equity ownership, 2028 forecast, %



Percentage based on production volumes x ownership equity stake. Owner origin country based on location of company's headquarters. DATA: CRU Battery Value Chain Service, December 2023