

Contents



www.klb.com.tw

KUNG LONG

- **♦** Company introduction
- **◆** Industry overview
- **♦** Sale Profile
- **♦** Financials
- **♦** Performance of Vietnam plant
- **♦** Our strength and outlook





Kung Long Batteries

- ◆ <u>Company</u> <u>introduction</u>
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> <u>introduction</u>
- ◆Our strength
- ◆Future outlook

Established date	Jan. 25, 1990
Listed date	Jan. 22, 2002 (TWSE : 1537)
HQ address	No.6 Tzu-Li 3 Rd, Nantou city
Plant	Taiwan-Kung Long(1990) \ Le Long(1995)
	Vietnam-Ben Luc(1996) · Duc Hoa(2007)
Capital	NTD 817,853,940
Main activity	Batteries for renewable energy and storage system, batteries for telecom and switch stations, UPS batteries > EV batteries > Starting batteries
Numbers of employees	About 4,100 people





Main products

- ◆ <u>Company</u> introduction
- ◆ <u>Industry</u> <u>overview</u>
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ◆Our strength
- ◆Future outlook







UPS

Electric Tools

Electric Vehicle











Telecom





- ◆ <u>Company</u> introduction
- ◆<u>Industry</u> overview
- ◆Sales Profile
- ◆ <u>Financials</u>
- ◆ Vietnam plant introduction
- ◆Our strength
- ◆<u>Future outlook</u>

Market outlook



Lead-acid Batteries Market Scope Forecast (Unit: Million USD\$) Sources- IEKof ITRI (Dec/2016)

In terms of current market size of lead-acid batteries, it is USD 43.7 billion globally in year 2016. With the development of automobiles, motorcycles, and energy storage applications in the future, it is expected that future 's market growth will be 1%~2%. In comparison with the market size of Nickel secondary batteries being USD 2.5 billion, and that of Lithium batteries being USD 20 billion, lead-acid batteries are still the electricity storage products with the biggest shares.





The strength of lead-acid batteries

- ◆ <u>Company</u> <u>introduction</u>
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> introduction
- ♦0ur strength
- ◆Future outlook

1.High C/P ratio

The high C/P ratio of leadacid batteries has been standing for long time.

2. Wide applications

Lead-acid batteries can be used for starting, energy storage, telecom, transportation purposes.

Strength

3. Safety

Compared with other batteries, lead-acid batteries are more stable and of higher performance.

4. Recyclable and reusable

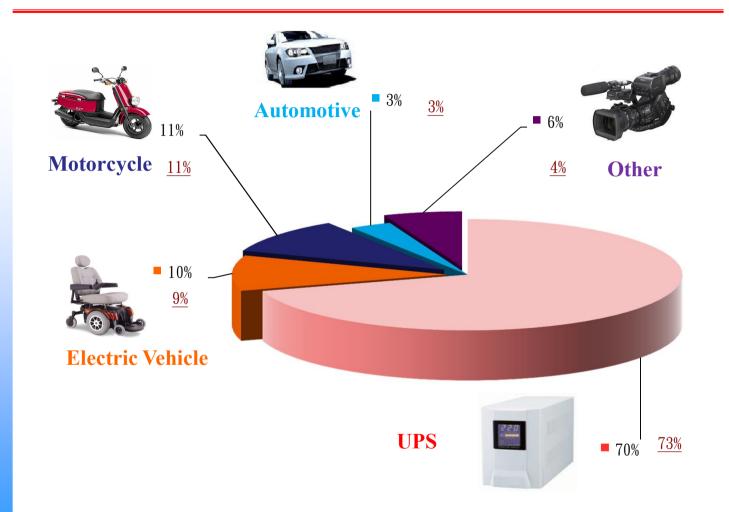
Wasted lead-acid batteries can be recycled. They are also the only battery product whose raw materials can be reused.





2017 Sales Profile by application

- ◆ <u>Company</u> <u>introduction</u>
- ◆<u>Industry</u> overview
- ◆<u>Sales Profile</u>
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆Future outlook



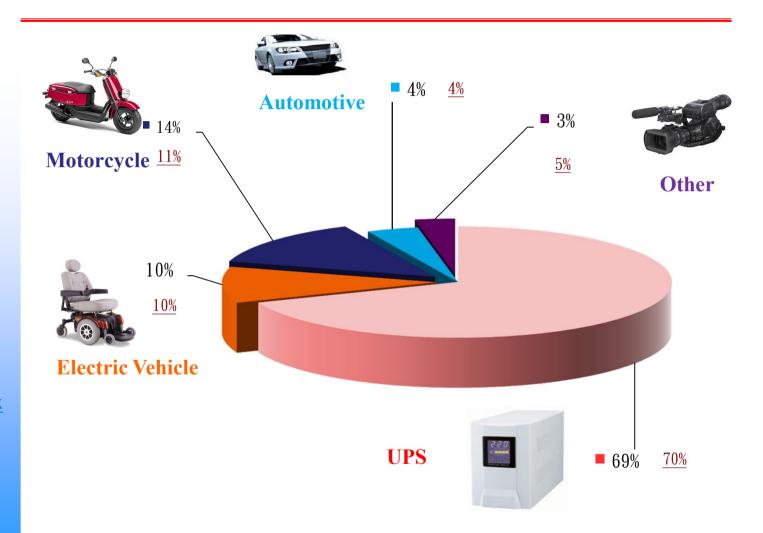
PS Letters highlighted in red stand for the numbers of 2016





2018 1Q Sales Profile by application

- ◆ <u>Company</u> <u>introduction</u>
- ◆<u>Industry</u> overview
- ◆<u>Sales Profile</u>
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆Future outlook



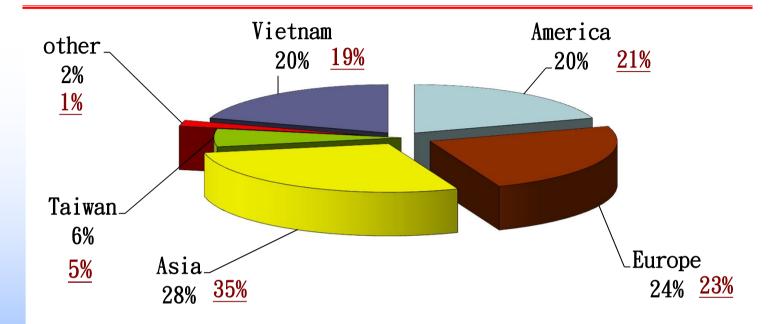
PS Letters highlighted in red stand for the numbers of 2017





2017 Sales Profile by geography

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> <u>overview</u>
- ◆Sales Profile
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆Future outlook



PS Letters highlighted in red stand for the numbers of 2016

Currency: thousand NTD

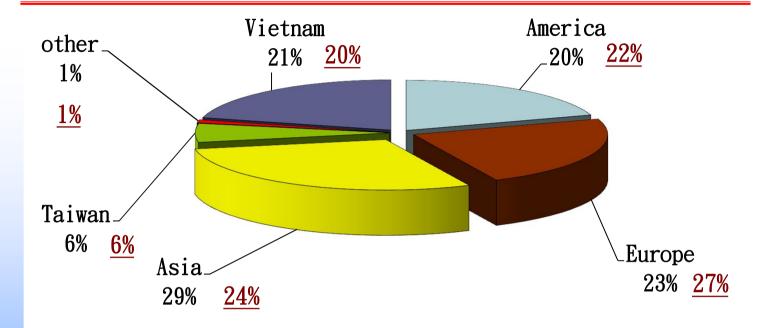
Area	America	Europe	Asia	Taiwan	0thers	Vietnam
2017年	1, 587, 412	1, 874, 993	2, 175, 850	437, 418	141, 429	1, 555, 729
%	20%	24%	28%	6%	2%	20%
2016年	1, 454, 697	1, 601, 437	2, 181, 717	349, 320	116, 390	1, 320, 321
%	21%	23%	31%	5%	1%	19%





2018 1Q Sales Profile by geography

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆<u>Future outlook</u>



PS Letters highlighted in red stand for the numbers of 2017

Currency: thousand NTD

Area	America	Europe	Asia	Taiwan	0thers	Vietnam
2018年Q1	388, 550	454, 386	574, 110	120, 922	30, 234	415, 053
%	20%	23%	29%	6%	1%	21%
2017年Q1	377, 615	453, 706	416, 333	107, 318	22, 813	342, 958
%	22%	27%	24%	6%	1%	20%

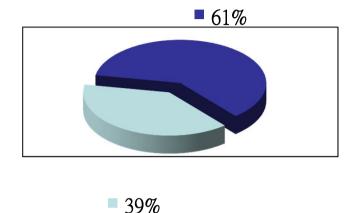




Sales by brand-consolidated

Percentage of own brand and OEM brand in 2018 1Q

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆Future outlook



own brand

■ OEM



worldwide



Vietnam





Financials -consolidated

Consolidated income statement

Currency: million NTD

- ◆ <u>Company</u> introduction
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **♦**Financials
- ◆<u>Vietnam plant</u> <u>introduction</u>
- ◆Our strength
- ◆Future outlook

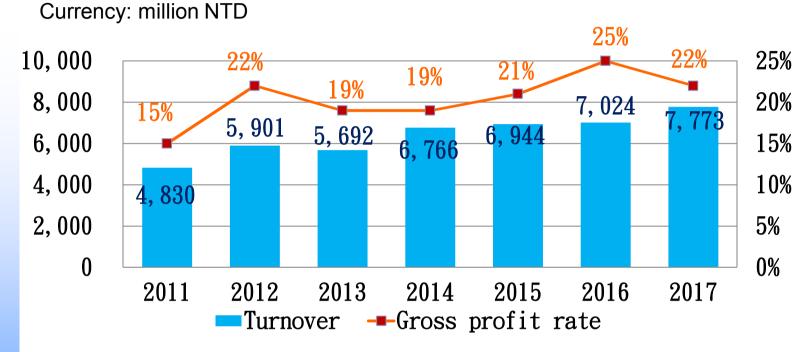
category	2012	2013	2014	2015	2016	2017	2018 1Q
Operating revenue	5, 901	5, 695	6, 766	6, 944	7, 024	7, 773	1, 983
Gross profit	1, 271	1, 109	1, 299	1, 430	1, 732	1, 755	410
Gross Margin	22%	19%	19%	21%	25%	22%	20%
Operating profit	837	710	841	968	1, 229	1, 261	287
Pre-tax Profit	847	753	898	1, 052	1, 251	1, 198	258
After-tax profit	629	579	676	802	948	906	199
Profit attributable to former owner of business combination under common control	616	573	660	769	870	728	199
EPS(NTD)	7. 55	7. 02	8. 09	9. 42	11.31	11. 04 Aver	
Average LEAD price(USD/ton)	2, 062	2, 142	2, 096	1, 786	1,871	2, 318	2, 523





Consolidated Sales

- ◆ <u>Company</u> introduction
- ◆<u>Industry</u> <u>overview</u>
- ◆Sales Profile
- ◆ <u>Financials</u>
- ◆ Vietnam plant introduction
- ◆Our strength
- ◆Future outlook



Consolidated Turnover	4,830	5,901	5,695	6,766	6,944	7,024	7,773
LME average price(USD/MT)	2,402	2,062	2,142	2,096	1,786	1,871	2,318
Gross Profit Margin	15%	22%	19%	19%	21%	25%	22%
After-tax EPS	3.90	7.55	7.02	8.09	9.42	11.31	11.04

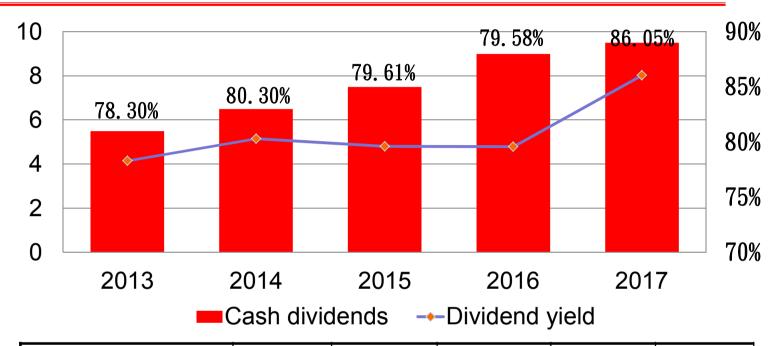




Dividend policy

(元)

- ◆ <u>Company</u> introduction
- ◆ <u>Industry</u> <u>overview</u>
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> <u>introduction</u>
- ◆Our strength
- ◆Future outlook



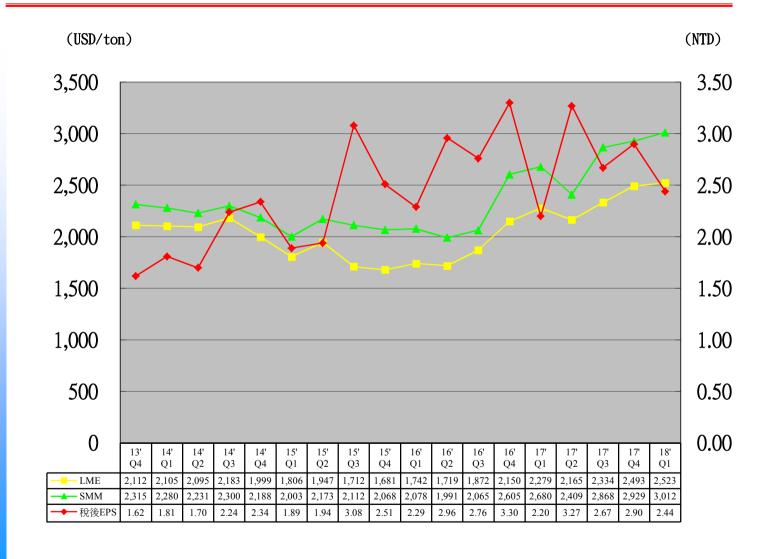
		2013	2014	2015	2016	2017
EPS		7. 02	8.09	9.42	11.31	11.04
Dividend	Cash dvidends	5. 50	6. 50	7. 50	9. 00	9. 50
distribution	Stock dividends	1	-	-	_	_
Dividend yield		78.3%	80.3%	79. 61%	79. 58%	86.05%





Comparison chart of LME, SMM, and EPS

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> <u>overview</u>
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ◆Our strength
- ◆Future outlook

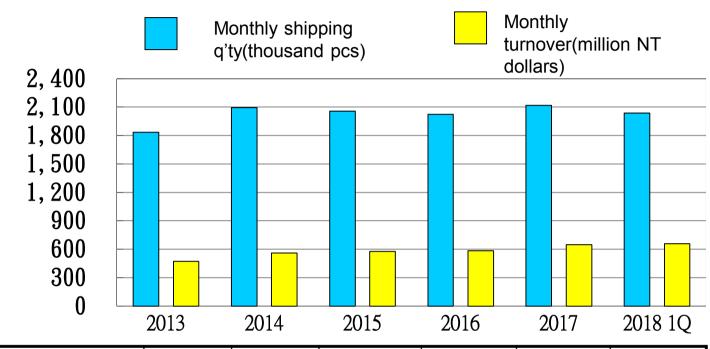






Sales Quantity by KL group

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> <u>overview</u>
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> introduction
- ◆Our strength
- ◆Future outlook



Monthly shipping q'ty	1,835	2, 095	2, 057	2, 026	2, 119	2, 039
Growth rate of shipping q'ty	-3%	14%	-2%	-2%	5%	-4%
Monthly turnover	474	564	579	585	648	661
Growth rate of turnover	-4%	19%	3%	1%	11%	2%





Location

- ◆ <u>Company</u> introduction
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ◆Our strength
- ◆Future outlook







Location

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> introduction
- ◆Our strength
- ◆Future outlook

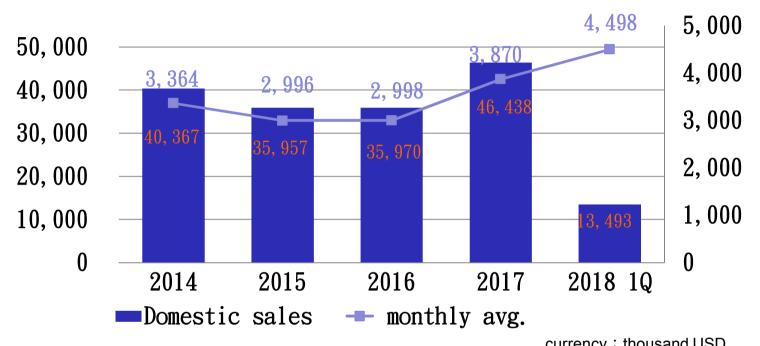






Turnover of Le Long Vietnam

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> <u>overview</u>
- ◆Sales Profile
- ◆ <u>Financials</u>
- ◆<u>Vietnam plant</u> intr<u>oduction</u>
- ◆Our strength
- ◆Future outlook



				currency	/ · tribusariu USD
Category	2014	2015	2016	2017	2018 1Q
Domestic sales	40,367	35,957	36,918	46,438	13,493
Domestic sales monthly avg.	3,364	2,996	3,077	3,870	4,498





Ben Luc plant

- ◆ <u>Company</u> introduction
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> introduction
- ◆<u>Our strength</u>
- ◆Future outlook



36,500 square meters





Ben Luc plant

- ◆ <u>Company</u> introduction
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> introduction
- ◆<u>Our strength</u>
- ◆Future outlook



36,500 square meters





Duc Hoa plant

- ◆ <u>Company</u> introduction
- ◆<u>Industry</u> <u>overview</u>
- ◆Sales Profile
- ◆ <u>Financials</u>
- ◆<u>Vietnam plant</u> intr<u>oduction</u>
- ◆Our strength
- ◆Future outlook



350,000 square meters (200,000 square meters are developed)





Duc Hoa plant

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> intr<u>oduction</u>
- ◆Our strength
- ◆Future outlook



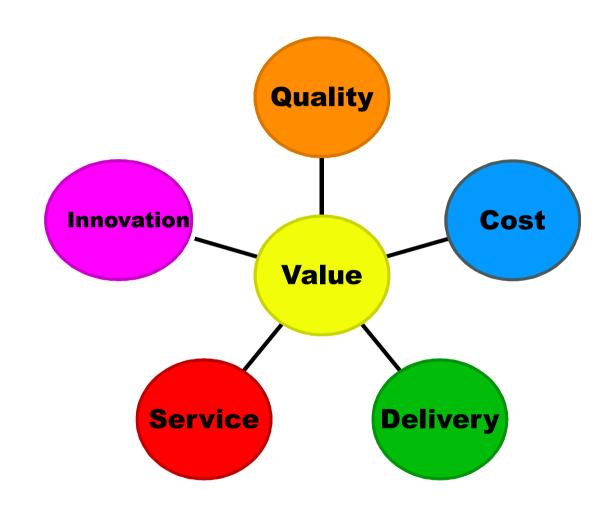
2010-2015:Increase productivity, Introducing automatic equipment





Core value

- ◆ <u>Company</u> introduction
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆Future outlook







Strength

KLB Strength

- ◆ <u>Company</u> <u>introduction</u>
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆<u>Vietnam plant</u> introduction
- ♦0ur strength
- ◆Future outlook

1.Excellent and stable quality

The production of lead-acid batteries comprises the know-how of electrochemistry and complex system of manufacturing & management. It is not easy to produce quality batteries stably for the long term.

2. The enhancement of entrance barrier

With more and more people realizing the importance of environmental protection, China has imposed lots of restrictions on the manufacturing of lead-acid batteries including the production scale, facilities, and environmental protection...etc. This standard is also considered by many other countries, and therefore there's no new comer for many years. And besides China, there're few manufacturers in other Asian

3. Higher qualification standard

It takes long time to test individual battery performance and service life. The most important is that the incoming inspection can not determine the service life of batteries. Thus, quality customers will set up high qualification procedure and field audit for new comers. We are able to develop the products meeting customer needs.





Strength

KLB Strength

◆ <u>Company</u> <u>introduction</u>

- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆Our strength
- ◆ Future outlook

4. Successful localization in Vietnam

All our supervisors are Vietnamese, and Taiwanese management people can communicate with them in Vietnamese language without problem. By the way, we enter Vietnam market early and take high shares in M/C AM market. Our batteries have been recognized as high quality. Our brand images is also well established. All of these are very helpful for our profits. Also, the investment environment in Vietnam is good and government seldom interferes.

5. Superior R&D ability

We're devoted to the upgrade and diversity of lead-acid batteries. Through the enhancement of battery performance, we not only make more profits but also develop lower-end products to help customers take more market shares. Our program has been extended from current small sized SLA to medium/large sized ones. We also develop star stop batteries to expend client bases.

6. Quality client bases

Our customers include leading companies in each industries, thus the importers in each areas are willing to distribute our products. Moreover, as the sales territories and customers are properly diversified, we can avoid the huge impacts resulted by single industry and economic factors.





Strength

External environment

- ◆ <u>Company</u> <u>introduction</u>
- ◆<u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆Our strength
- ◆Future outlook

Most of our competitors has factory in China. But the issuance of "manufacturing permission of SLA batteries " in 2011 has limited the development of SLA industry and eliminated lagging production. We're the professional UPS battery manufacturer with biggest capacity in Southeast Asia, and it can help us to take more orders than our competitors.

Main production bases of small/ medium sized SLA batteries are located in China and Vietnam. When Chinese labor costs keep rising, RMB is under pressure for appreciation, and SLA industry is limited, Chinese battery manufacturers are forced to move to outside. However it's difficult to find a suitable location. While we're producing in Vietnam and we can expand our capacities to maintain our advantages

Recently China publishes the notice for imposing consuming tax on batteries and pasting – starting from 1//1/2016, 4% consuming tax will be imposed on leadacid battery manufacturing, OEM, and import. It is expected that this will bring significant burden to Chinese lead-acid battery factories.





Future outlook

◆ <u>Company</u> introduction

- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ◆<u>Our strength</u>
- ◆<u>Future outlook</u>

R&D projects

Long-life floating charge batteries

Deep cycle lead-carbon batteries for renewable energy applications

Research on long cycle life leadcarbon batteries Mass production for long life Intelligent start-stop (ISS) batteries

The introduction of large circularwelding process and single-achine & welding-free process

Back-up batteries for 4G and cloud data centers





Future outlook

- ◆ <u>Company</u> <u>introduction</u>
- ◆ <u>Industry</u> overview
- ◆Sales Profile
- **◆**Financials
- ◆ Vietnam plant introduction
- ◆Our strength
- ◆ <u>Future outlook</u>

1. Continuous introduction of automatic equipment:

Introducing automatic equipment to increase production efficiency, decrease material waste and maintenance cost, to lower the dependence on manpower.

2.Continuous development on light-weight models:

Continuously develop light weight models which meet market needs to increase gross margin.

3. The promotion of new products and market:

Develop large sized SLA batteries for industrial and telecom applications to segment current mass products and obtain niche market.





Marketing layout

- **◆**Company introduction
- ◆ Industry overview
- ◆Sales Profile
- **◆**Financials
- ◆Vietnam plant introduction
- ♦0ur strength
- ◆Future outlook

Risk perspective

- * Sustainable development on environment protection policy
- * Right response to the fluctuation of lead price and cost

Sales perspective

- · Actively satisfy customer needs and develop new market to increase market shares
- Adjust sales price according to lead cost, and set a fair way for transactions.
- Establishing product position and doing the market segmentation.

Technical perspective

- * Continuous research and development
- * Possess critical technology
- * Implement more processing control systems

 Continuously develop batteries suitable for renewable energy.

Manufacturing

perspective

- Continuously develop large sized SLA batteries for telecom applications.
- · Continuously proceed the design and modification for automatic production.
- Develop long life time and advanced start stop batteries.

















Vincent Liu

Financial Senior Manager

Email: vincent@mail.klb.com.tw

TEL:+886-49-2254777

LONG BATTERY • • •