廣隆光電科技股份有限公司

KUNG LONG BATTERIES INDUSTRIAL CO., LTD.

Performance and future outlook

Stock Code : 1537

Contents

Kung Long Batteries

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 4,093 people

KUNG LONG

Main products

Backup Power
For UPS, Security, Fire Alarm System

High Power
For Telecommunication,
UPS System

Green Power
For Solar and Renewable Energy,
Deep Cycle

Electric Vehicle Power
For Mobility Scooter, Electric Vehicle,
Golf Trolley, Medical

Long Life Power
For Telecommunication,
UPS System

Cyclic Power
For Multi-Purpose

KUNG LONG

Main products

UPS

Automotive

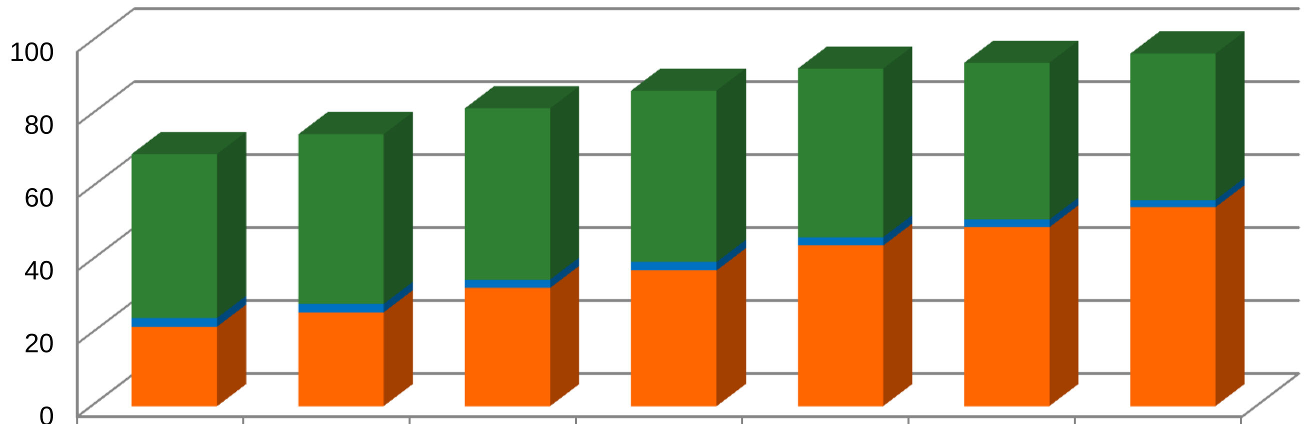
Motorcycle

Electric Tools

Electric Vehicle

Telecom

Market outlook



	2016	2017	2018	2019E	2020(F)	2021(F)	2022(F)
Lead acid	44.9	46.5	46.9	47	46.2	43	40.1
NiMH/NiCd	2.4	2.3	2.3	2.3	2.3	2.1	2
Li	21.8	25.7	32.4	37.2	44	49	54.5

Lead-acid Batteries Market Scope Forecast (Unit: billion USD$)
Sources- IEKof ITRI (Apr./2019)

In terms of current market size of lead-acid batteries, it is USD 47 billion globally in year 2019 for automobiles、motorcycles and energy storage fileds. In comparison with the market size of Nickel secondary batteries being USD 2.3 billion, and that of Lithium batteries being USD 37.2 billion, lead-acid batteries are still the electricity storage products with the biggest shares.

The strength of lead-acid batteries

One

High C/P ratio

The high C/P ratio of lead-acid batteries has been standing for long time.

Two

Wide applications

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

Three

Safety

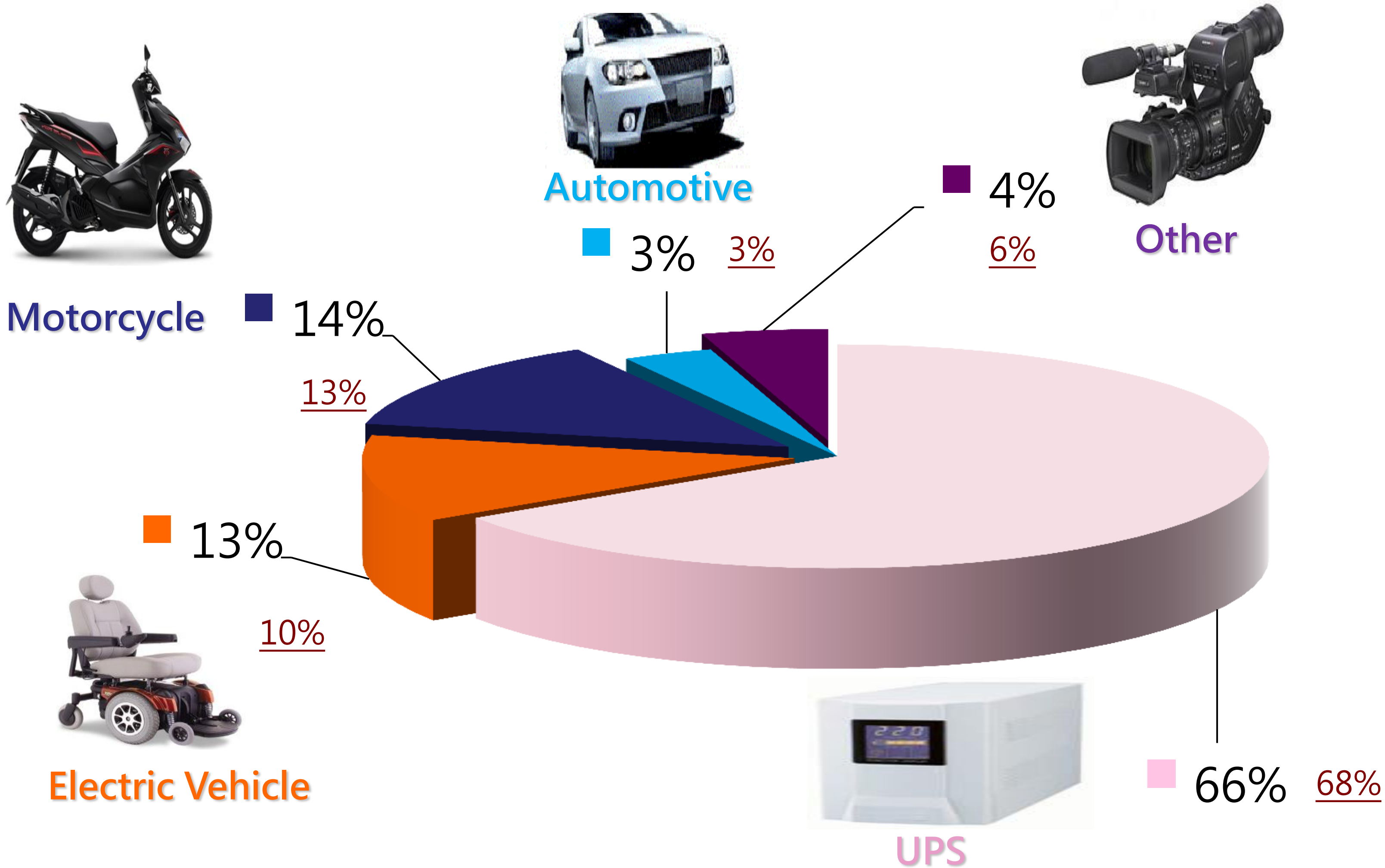
Compared with other batteries, lead-acid batteries are more stable and of higher performance.

Four

Recyclable and reusable

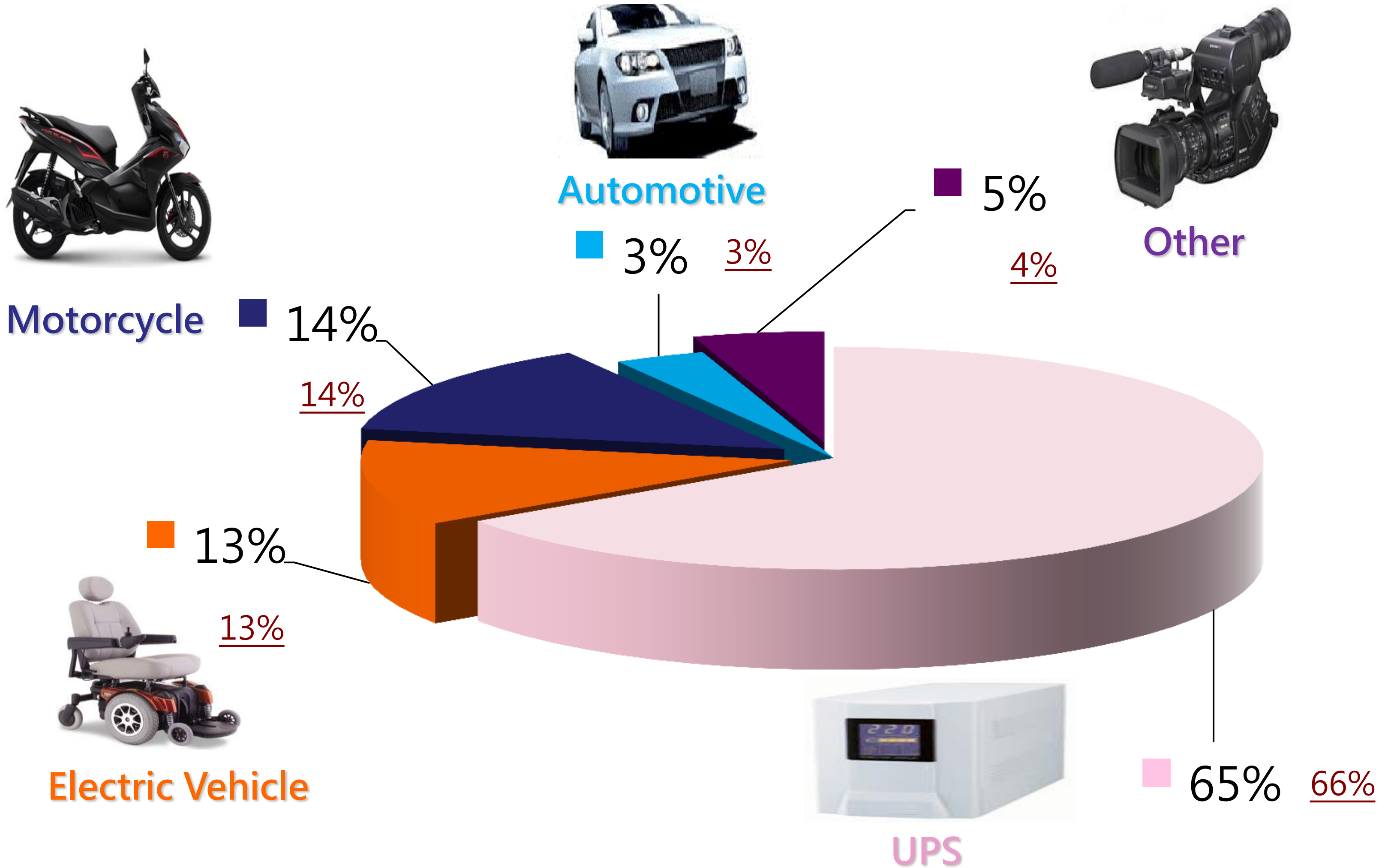
Wasted lead-acid batteries can be recycled. They are also the only battery product whose raw materials can be reused.

2019 Sales Profile by application



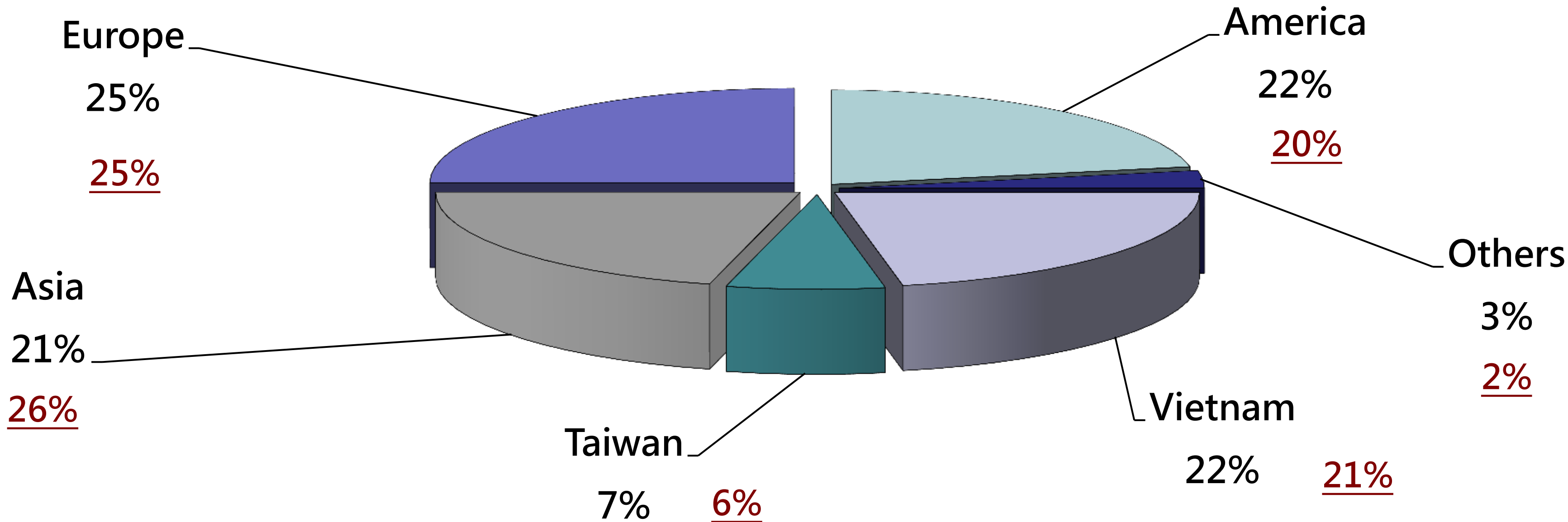
PS Letters highlighted in red stand for the numbers of 2018

2020 3Q Sales Profile by application



PS Letters highlighted in red stand for the numbers of 2019

2019 Sales Profile by geography

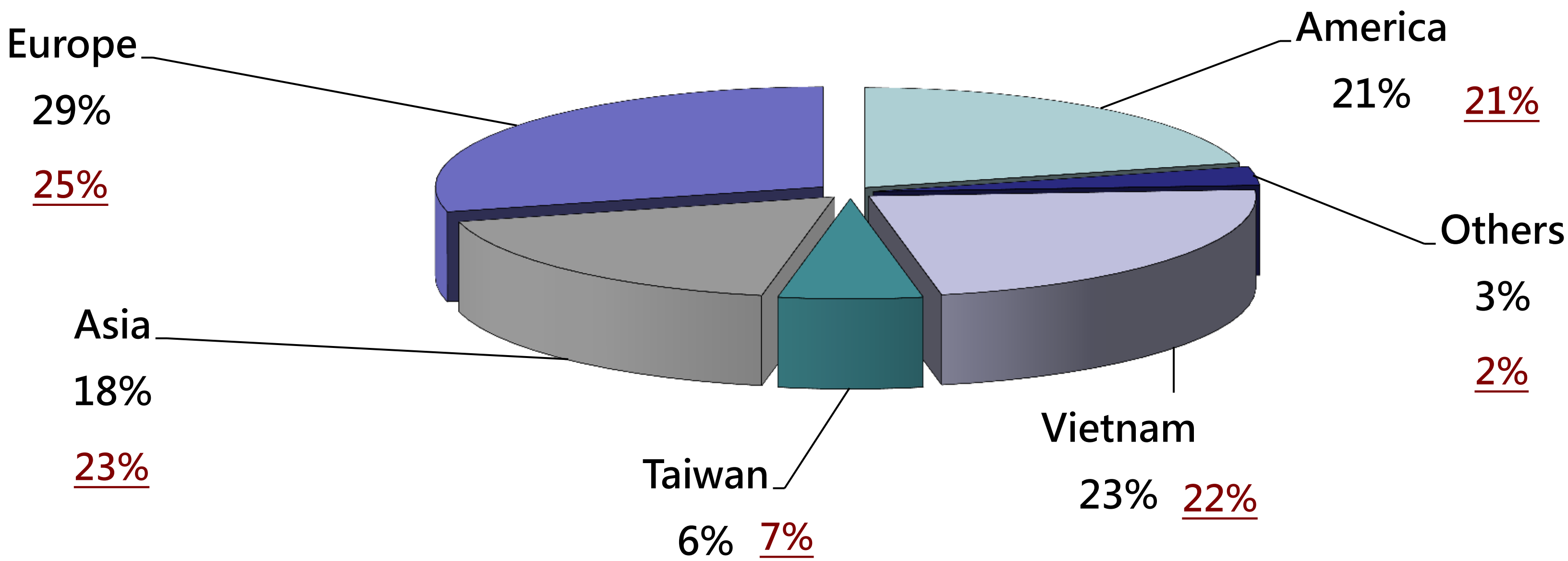


PS Letters highlighted in red stand for the numbers of 2018

Currency: thousand NTD

Area	America	Europe	Asia	Taiwan	Vietnam	Others
2019	1,725,702	1,975,166	1,688,216	550,405	1,789,875	204,225
%	22%	25%	21%	7%	22%	3%
2018	1,750,792	2,087,880	2,092,338	489,596	1,897,588	171,672
%	20%	25%	26%	6%	21%	2%

2020 3Q Sales Profile by geography



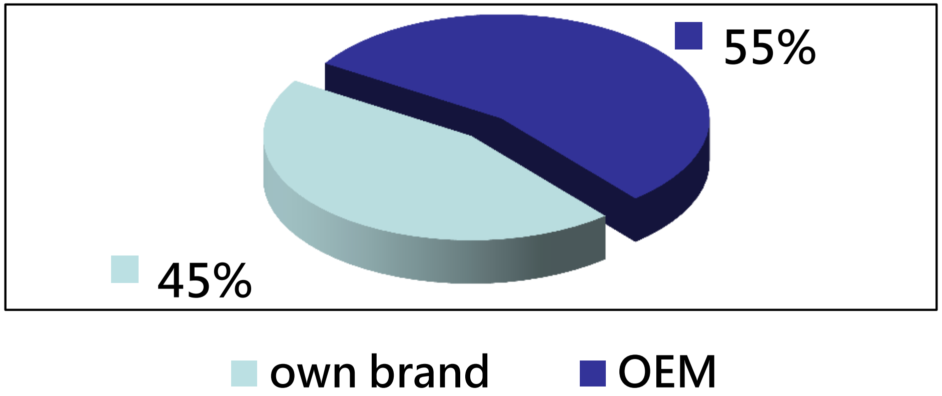
PS Letters highlighted in red stand for the numbers of 2019

Currency: thousand NTD

Area	America	Europe	Asia	Taiwan	Vietnam	Others
2020年3Q	1,109,725	1,544,785	930,852	308,358	1,188,765	148,840
%	21%	29%	18%	6%	23%	3%
2019年3Q	1,245,571	1,489,473	1,383,761	389,776	1,293,071	142,935
%	21%	25%	23%	7%	22%	2%

Sales by brand-consolidated

- Percentage of own brand and OEM brand in 2020 3Q



LONG Power your life
GLOBE Power your life

worldwide *Vietnam*

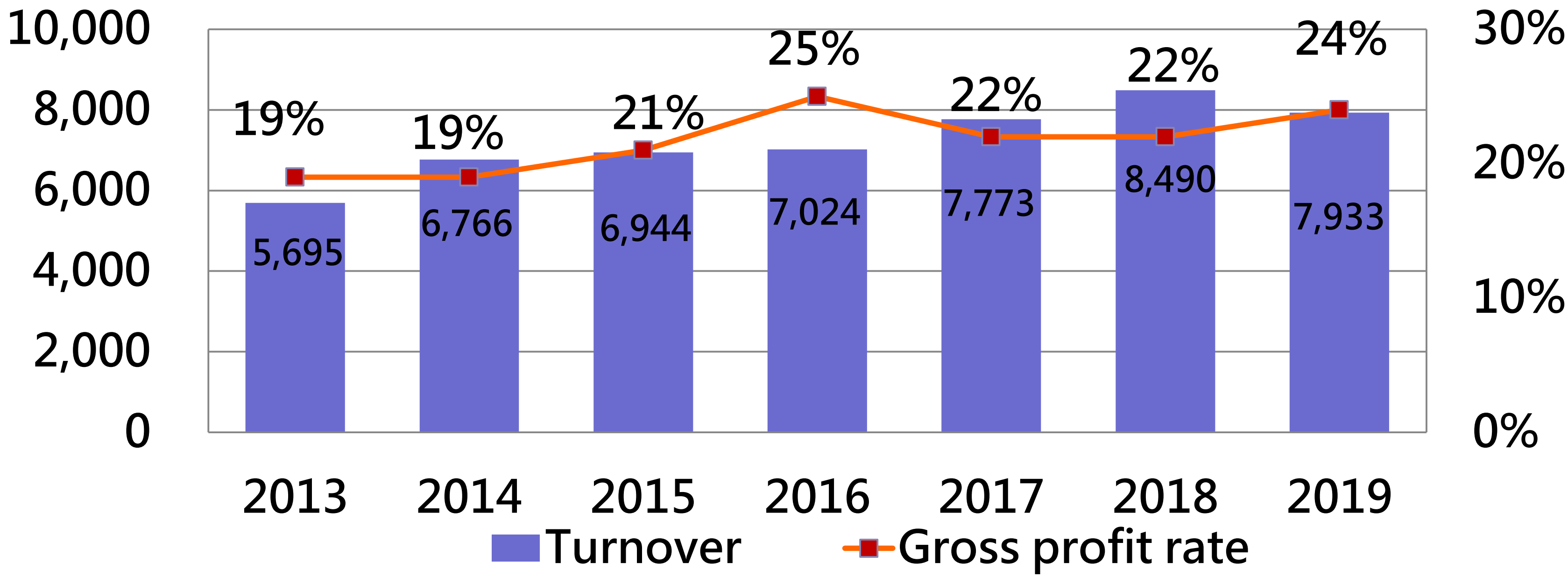
Financials -Consolidated income statement

Currency: million NTD

category	2015	2016	2017	2018	2019	For the nine months ended Sep. 20	For the three months ended Sep. 20
Operating revenue	6,944	7,024	7,773	8,490	7,933	5,231	1,838
Gross profit	1,430	1,732	1,755	1,831	1,854	1,192	456
Gross Margin	21%	25%	22%	22%	24%	23%	25%
Operating profit	968	1,229	1,261	1,243	1,312	864	333
Pre-tax Profit	1,052	1,251	1,198	1,332	1,344	867	329
After-tax profit	802	948	906	983	1,007	647	241
Profit attributable to former owner of business combination under common control	769	923	901	983	1,007	647	241
EPS(NTD)	9.42	11.31	11.04	12.03	12.32	7.91	2.95
Average LEAD price(USD/ton)	1,786	1,871	2,318	2,244	1,998	1,798	1,876

Average 11.22

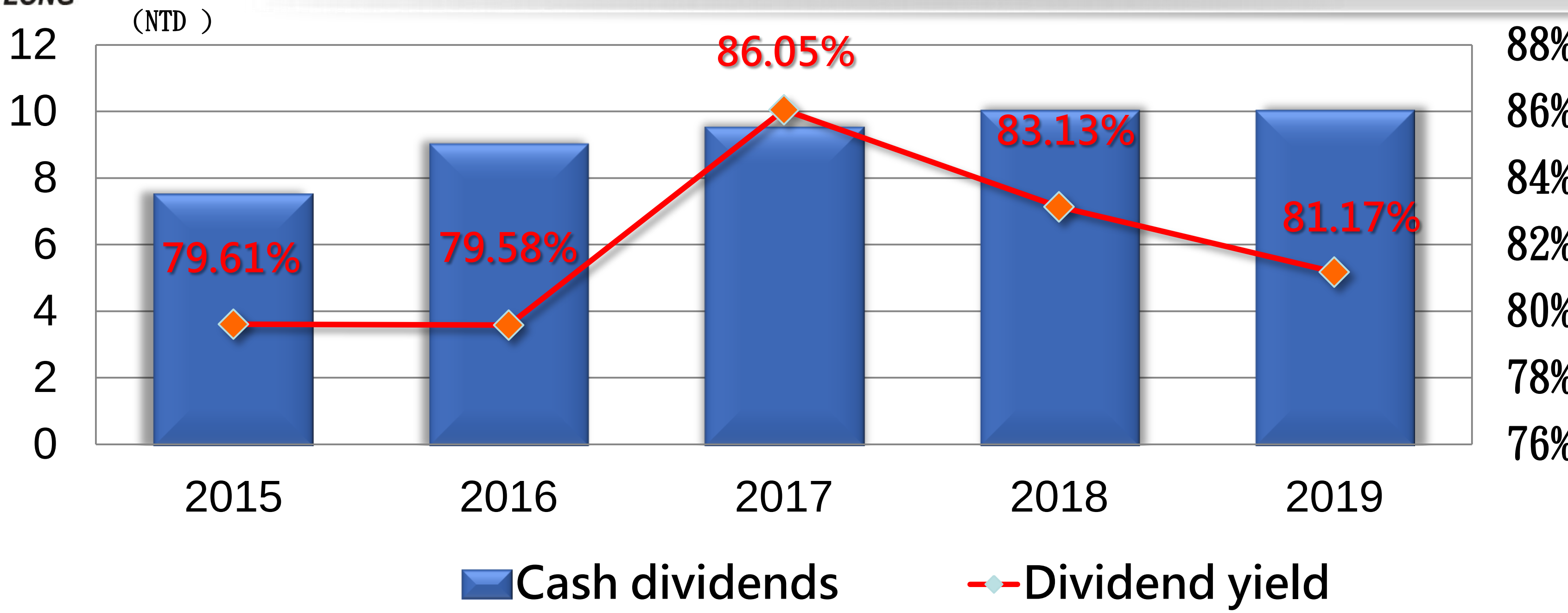
Consolidated Sales



Consolidated Turnover	5,695	6,766	6,944	7,024	7,773	8,490	7,933
LME average price(USD/MT)	2,142	2,096	1,786	1,871	2,318	2,244	1,998
Gross Profit Margin	19%	19%	21%	25%	22%	22%	24%
After-tax EPS	7.02	8.09	9.42	11.31	11.04	12.03	12.32

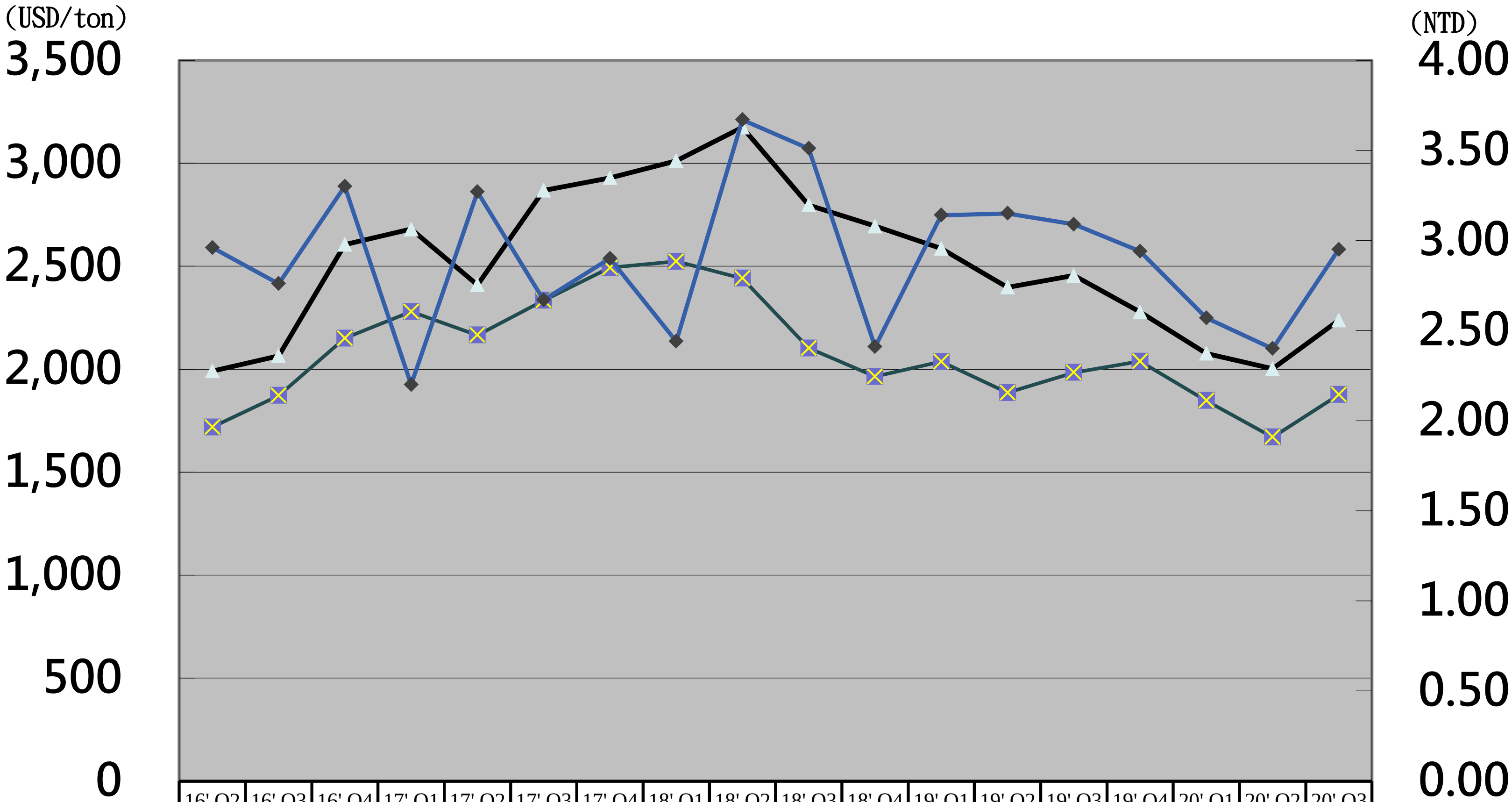
Average 21.7%

Dividend policy



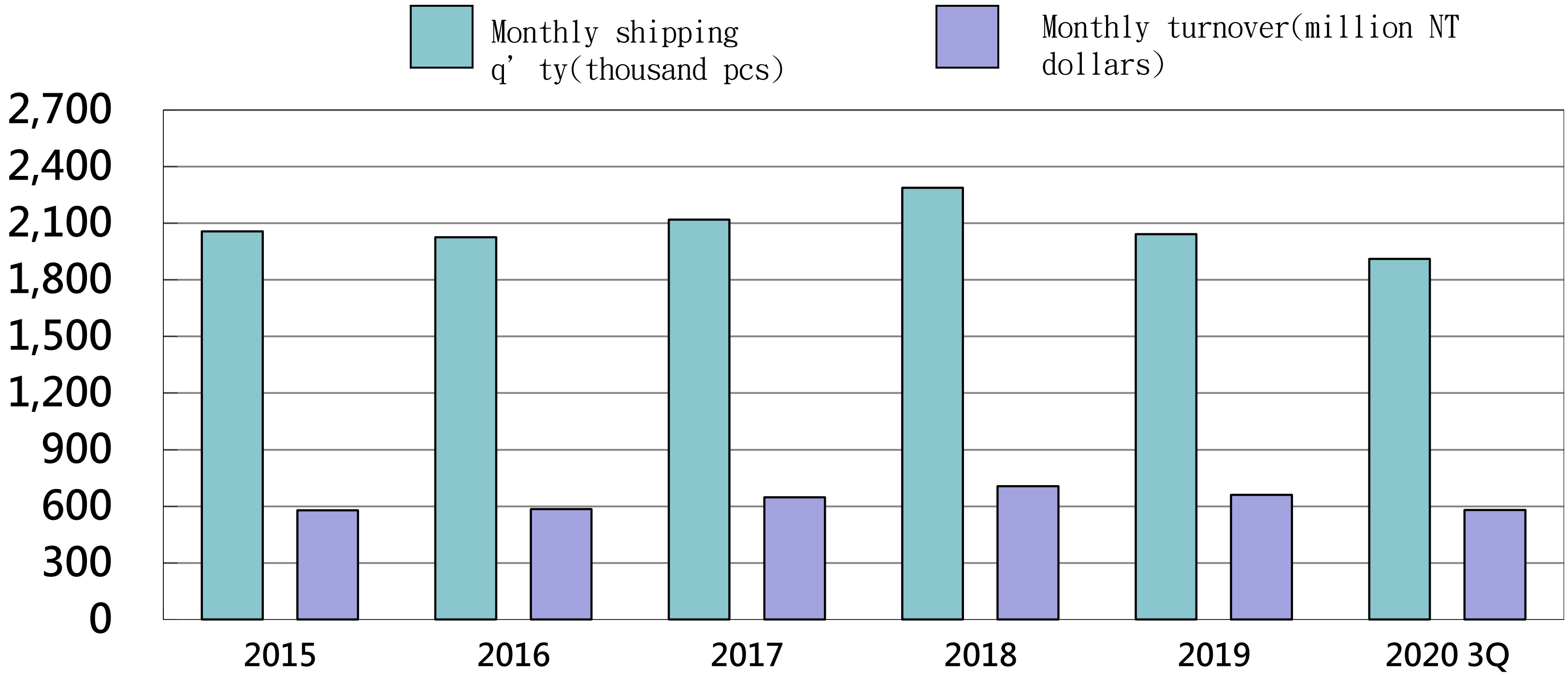
		2015	2016	2017	2018	2019
EPS		9.42	11.31	11.04	12.03	12.32
Dividend distribution	Cash dvidends	7.50	9.00	9.50	10.00	10.00
	Stock dividends	-	-	-	-	-
Dividend yield		79.61%	79.58%	86.05%	83.13%	81.17%

Comparison chart of LME, SMM, and EPS



	16' Q2	16' Q3	16' Q4	17' Q1	17' Q2	17' Q3	17' Q4	18' Q1	18' Q2	18' Q3	18' Q4	19' Q1	19' Q2	19' Q3	19' Q4	20' Q1	20' Q2	20' Q3
LME	1,719	1,872	2,150	2,279	2,165	2,334	2,493	2,523	2,441	2,102	1,964	2,037	1,886	1,984	2,038	1,847	1,670	1,876
SMM	1,991	2,065	2,605	2,680	2,409	2,868	2,929	3,012	3,175	2,797	2,695	2,586	2,398	2,455	2,278	2,077	2,002	2,238
EPS	2.96	2.76	3.30	2.20	3.27	2.67	2.90	2.44	3.67	3.51	2.41	3.14	3.15	3.09	2.94	2.57	2.40	2.95

Sales Quantity by KL group



Monthly shipping q' ty	2,057	2,026	2,119	2,288	2,024	1,911
Growth rate of shipping q' ty	-2%	-2%	5%	8%	-11%	-6%
Monthly turnover	579	585	648	707	661	581
Growth rate of turnover	3%	1%	11%	9%	-7%	-12%

Location

Vietnam

Location

Hanoi Sale Office

Danang Sale Office

Ho Chi Minh Sale Office

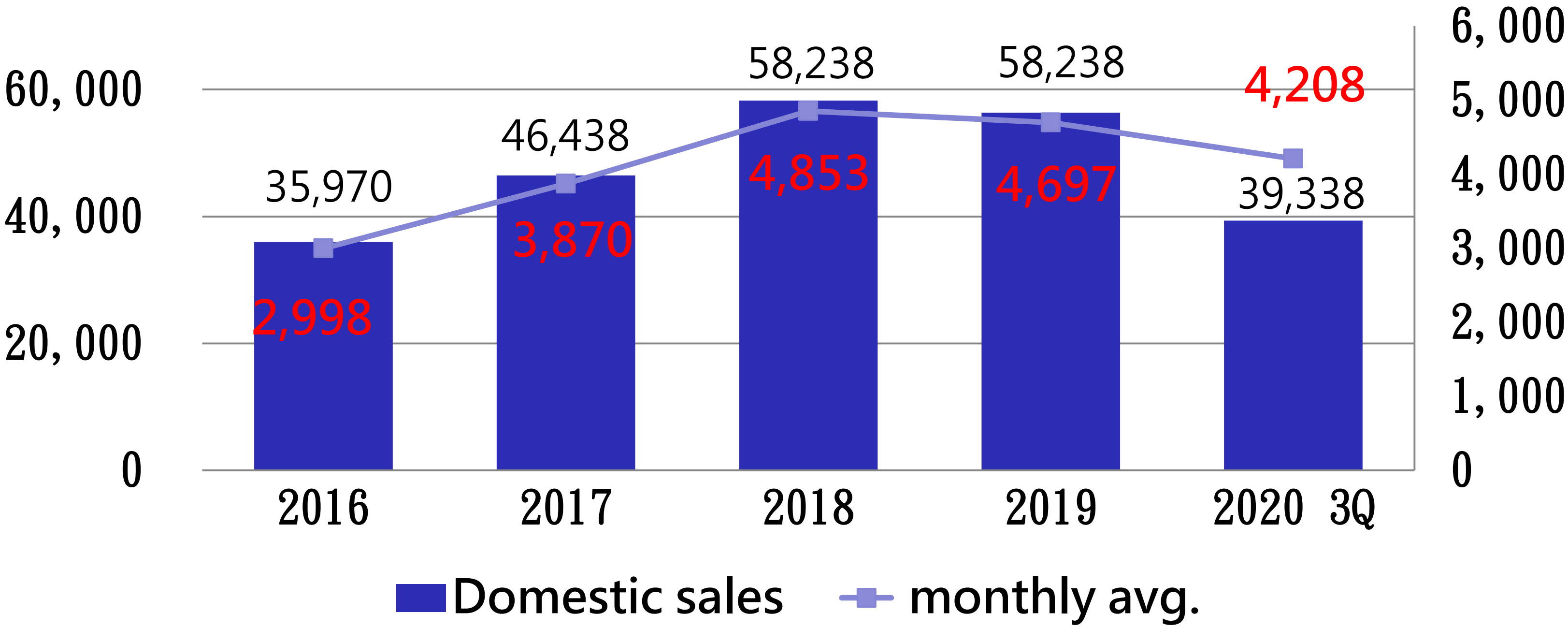
Duc Hoa Factory(2007)

Ben Luc Factory(1996)

Location


平福省
Bình PHước
西寧省
Tây Ninh
平陽省
Bình Dương
林同省
Lâm Đồng
同奈省
Đồng Nai
平順省
Bình Thuận
同塔省
Đồng Tháp
隆安省
Long An
1
2
3
4
5
巴地-頭頓省
Bà Rịa - Vũng Tàu
檳椥省
Bến Tre
茶榮省
Trà Vinh
朔莊省
Sóc Trăng
1. 胡志明市 Hồ Chí Minh
2. 前江省 Tiền Giang
3. 永隆省 Vĩnh Long
4. 芹苴市 Cần Thơ
5. 後江省 Hậu Giang

Turnover of Le Long Vietnam



currency：thousand USD

Category	2016	2017	2018年	2019	2020 3Q
Domestic sales	35,970	46,438	58,238	56,369	39,338
Domestic sales monthly avg.	2,998	3,870	4,853	4,697	4,371

Overview of Vietnam plant

Ben Luc plant

36,500 square meters

Turnover of Le Long Vietnam

Ben Luc plant

36,500 square meters

Overview of Vietnam plant

Duc Hoa plant

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

Turnover of Le Long Vietnam

KUNG LONG

Duc Hoa plant

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

Core value


Quality
Cost
Delivery
Service
Innovation
Power your life
LONG

Kung Long's ESG presence

Environment	Social Responsibility	Corporate Governance
• *Green Procurement* • *Energy Management* • *Environmental Protection Facilities* • *To Improve Manufacturing Process*	• *To Promote Local Culture* • *To Popularize Art and Culture Activities* • *To Care Social Vulnerable Groups* • *To Sponsor The Academics*	• *To Advance Shareholders Equity* • *To Enhance Information Transparency* • *To Strengthen Governor's Function* • *To Operate Business Honestly*

To Expand Social Responsibility as the Core of Business

Strength

Excellent 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.

High Entry 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.

Qualified 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

Localization

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.

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.

Quality client

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

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

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

Future outlook

Continuous introduction of automatic equipment

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

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.

Continuous development on light-weight models

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

Future outlook

KUNG LONG

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.***

Manufacturing perspective

- ***Continuously develop batteries suitable for renewable energy.***
- ***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.***

Technical perspective

*** Continuous research and development**

*** Possess critical technology**

*** Implement more processing control systems**

Vincent Liu

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