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

Kung Long Batteries

Established date
Jan. 25, 1990

Capital
NTD:821million

Numbers of employees
3,649

Listed date
Jan. 22, 2002
(Stock Code： 1537)

Plant
Taiwan-Kung Long(1990)、Le Long(1995)
Vietnam-Ben Luc(1996)、Duc Hoa(2007)

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

Cyclic Power
For Multi-Purpose

Long Life Power
For Telecommunication,
UPS System

Main products

UPS

Automotive

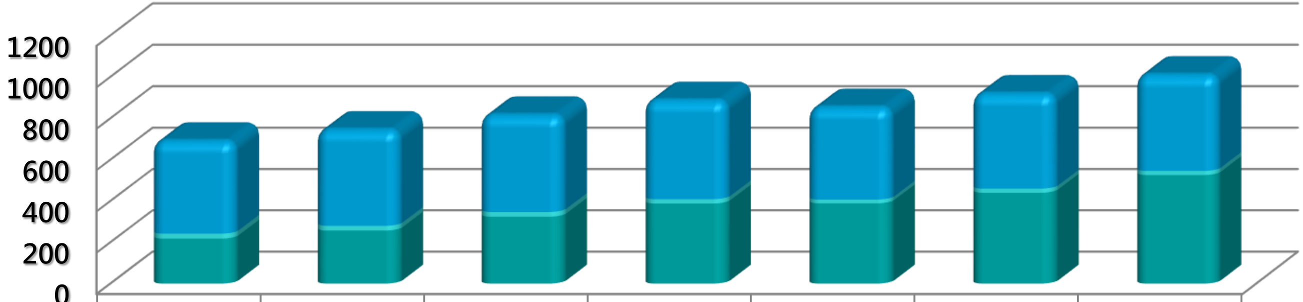
ISS Battery

Electric Tools

Electric Vehicle

Telecom

Market outlook



	2016	2017	2018	2019	2020(E)	2021(F)	2022(F)
Lead acid	449	465	469	478	446	459	464
NiMH/NiCd	24	23	23	21	18	20	20
Li	218	257	324	388	389	440	526

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

High C/P ratio :

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

Safety :

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

Wide applications :

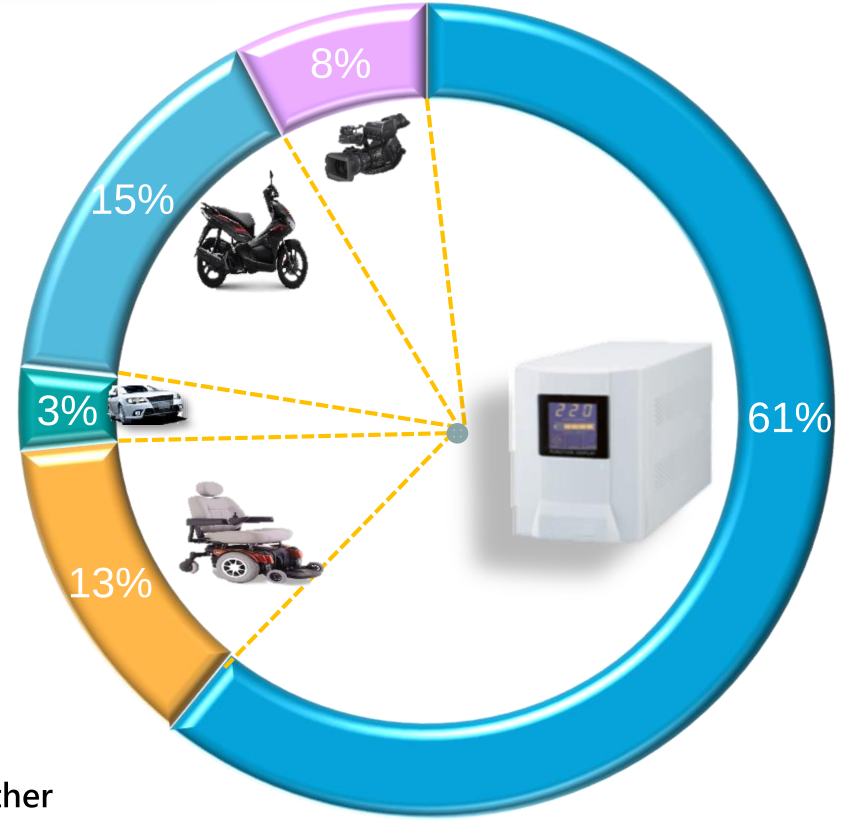
Lead-acid batteries can be used for starting, energy storage, telecom, transportation purposes.

Recyclable and reusable :

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

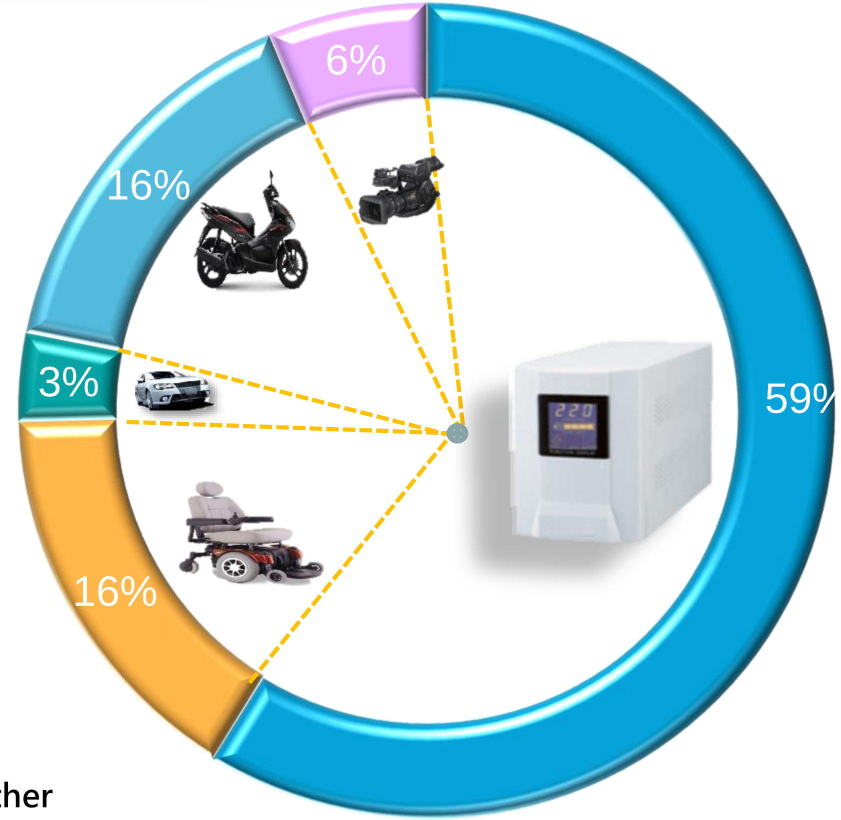
2021 Sales Profile by application

產品	2021	2020
UPS	61%	65%
Motorcycle	15%	14%
Electric Vehicle	13%	12%
Other	8%	6%
Automotive	3%	3%

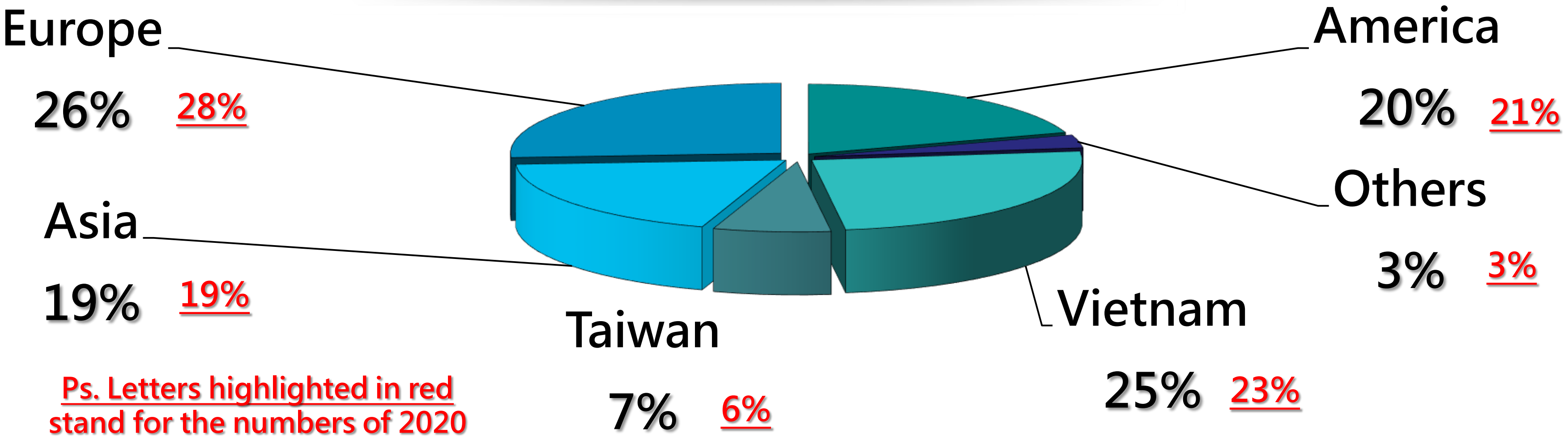


2022 1Q Sales Profile by application

產品	2022 1Q	2021 1Q
UPS	59%	63%
Motorcycle	16%	16%
Electric Vehicle	16%	12%
Other	6%	6%
Automotive	3%	3%



2021 Sales Profile by geography



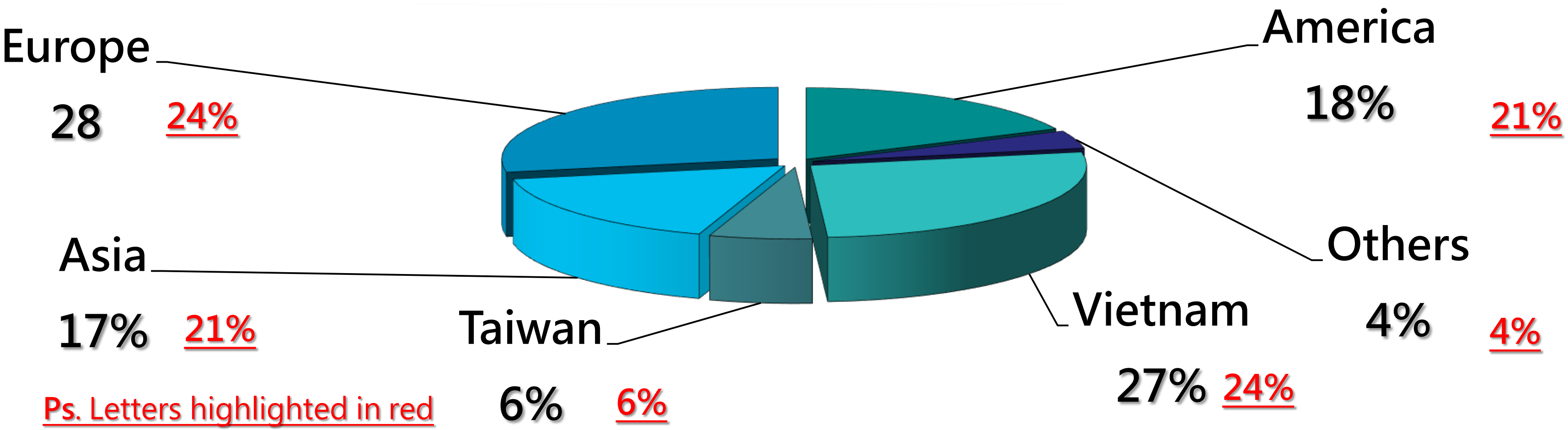
Ps. Letters highlighted in red stand for the numbers of 2020

Currency: thousand NTD

Area	America	Europe	Asia	Taiwan	Vietnam	Others
2021	1,181,714	1,479,983	1,071,914	408,193	1,455,559	199,247
%	20%	26%	19%	7%	25%	3%
2020	1,491,535	1,977,938	1,370,678	405,776	1,664,860	204,633
%	21%	28%	19%	6%	23%	3%

Power your life LONG

2022 1Q Sales Profile by geography



Ps. Letters highlighted in red stand for the numbers of 2021

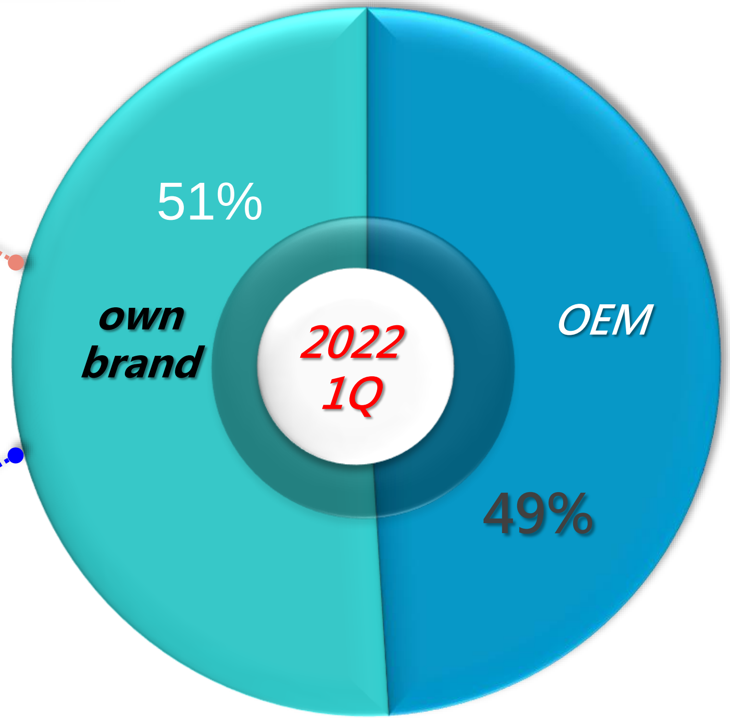
Currency: thousand NTD

Area	America	Europe	Asia	Taiwan	Vietnam	Others
2022 1Q	294,481	470,775	288,917	94,747	451,364	69,561
%	18%	28%	17%	6%	27%	4%
2021 1Q	358,344	408,496	364,875	95,321	403,127	65,810
%	21%	24%	21%	6%	24%	4%

Sales by brand-consolidated

Worldwide

Vietnam



Financials -Consolidated income statement

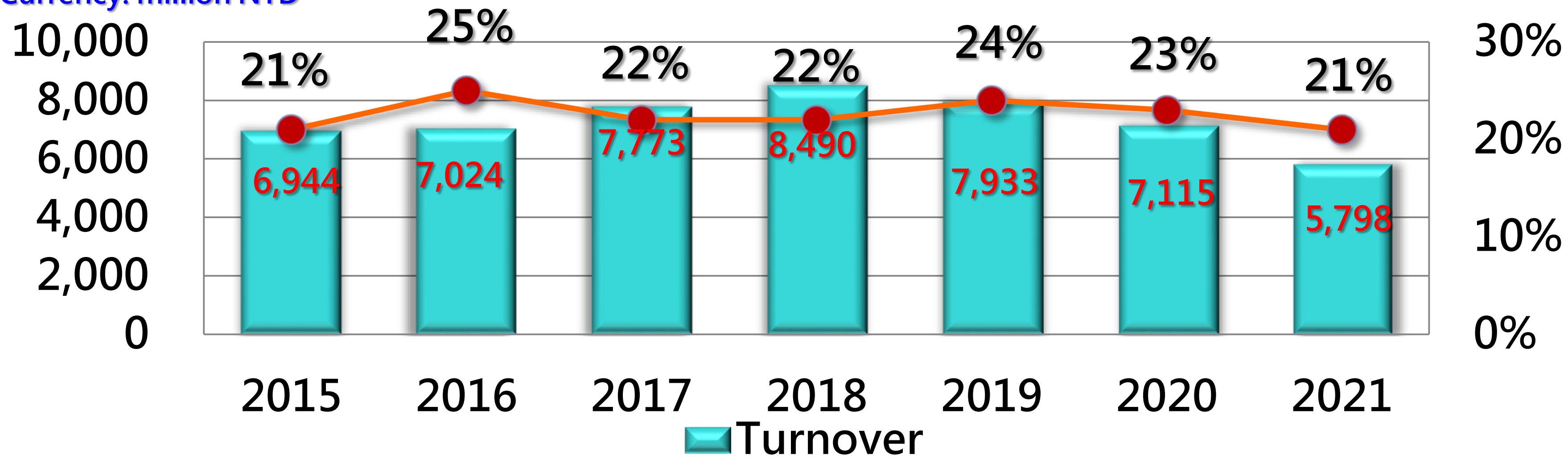
Currency: million NTD

category	2017	2018	2019	2020	2021	2022 1Q
Operating revenue	7,773	8,490	7,933	7,119	5,798	1,670
Gross profit	1,755	1,831	1,854	1,655	1,221	412
Gross Margin	22%	22%	24%	23%	21%	24%
Operating profit	1,261	1,243	1,312	1,199	795	279
Pre-tax Profit	1,198	1,332	1,344	1,186	818	343
After-tax profit	906	983	1,007	879	620	258
Profit attributable to former owner of business combination under common control	901	983	1,007	879	620	258
EPS(NTD)	11.04	12.03	12.32	10.75	7.58	3.16
Average LEAD price(USD/ton)	2,318	2,244	1,998	1,824	2,205	2,334

AVG 10.74

Consolidated Sales

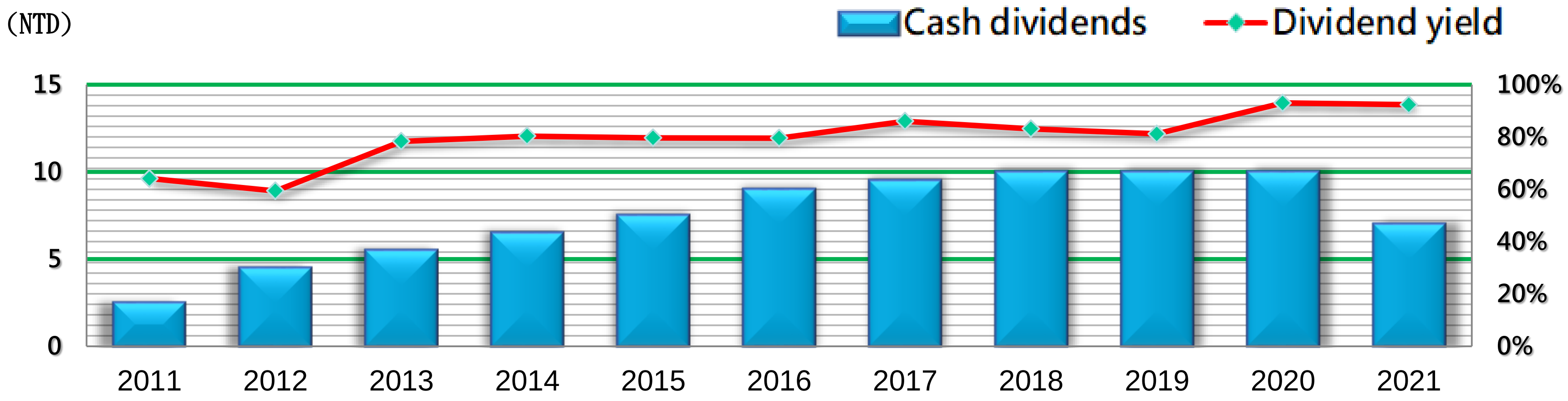
Currency: million NTD



Consolidated Turnover	6,944	7,024	7,773	8,490	7,933	7,115	5,798
LME average price(USD/MT)	1,786	1,871	2,318	2,244	1,998	1,824	2,205
Gross Profit Margin	21%	25%	22%	22%	24%	23%	21%
After-tax EPS	9.42	11.31	11.04	12.03	12.32	10.75	7.58

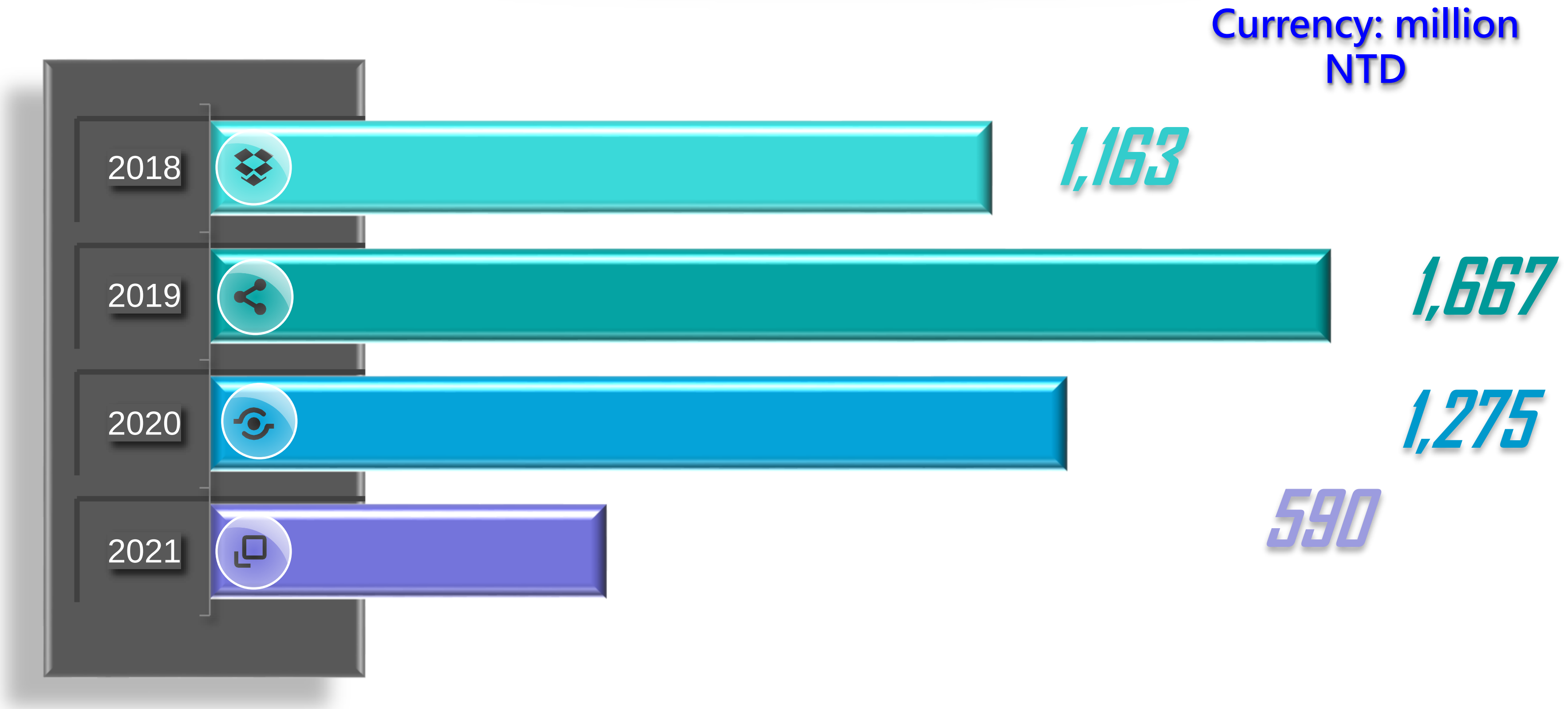
AVG 22.57%

Dividend policy

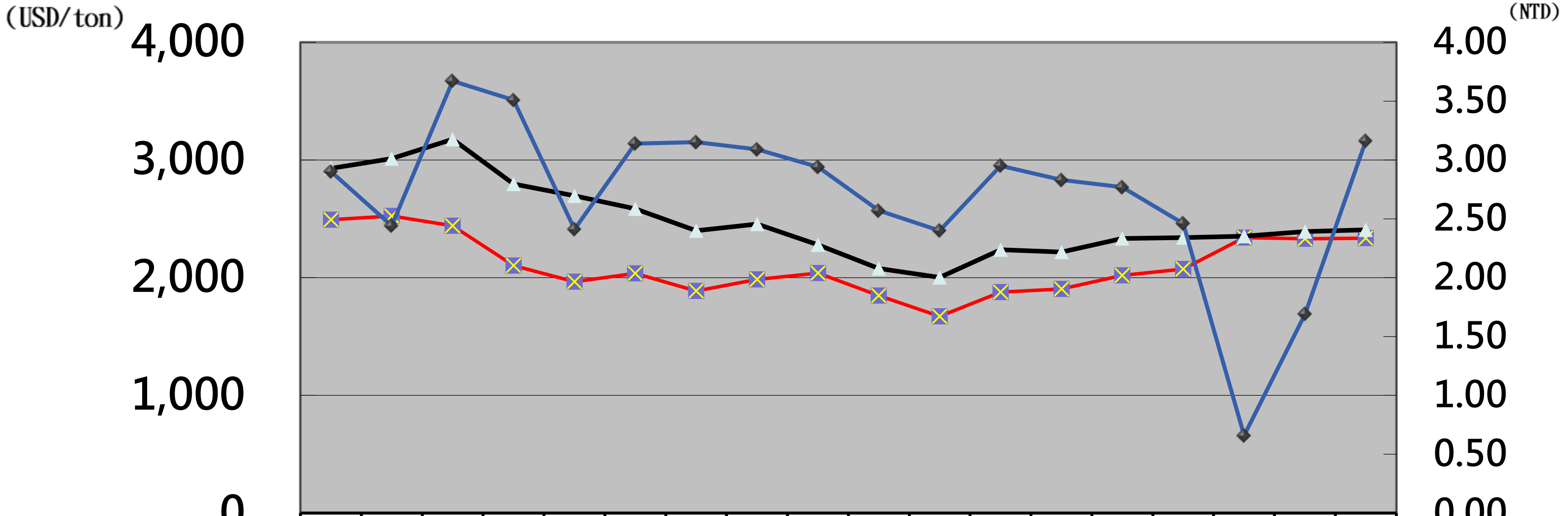


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
EPS	3.9	7.58	7.02	8.09	9.42	11.31	11.04	12.03	12.32	10.75	7.58
Cash dividends	2.5	4.5	5.5	6.5	7.5	9	9.5	10	10	10	7
Dividend yield	64%	59%	78%	80%	79%	80%	86%	83%	81%	93%	92%

Operating cash flow



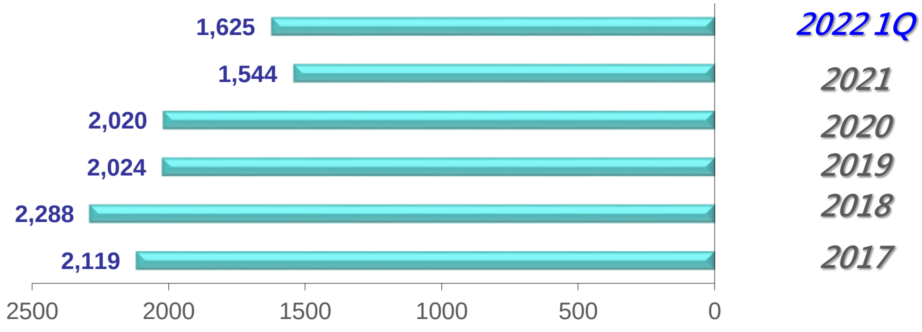
Comparison chart of LME, SMM, and EPS



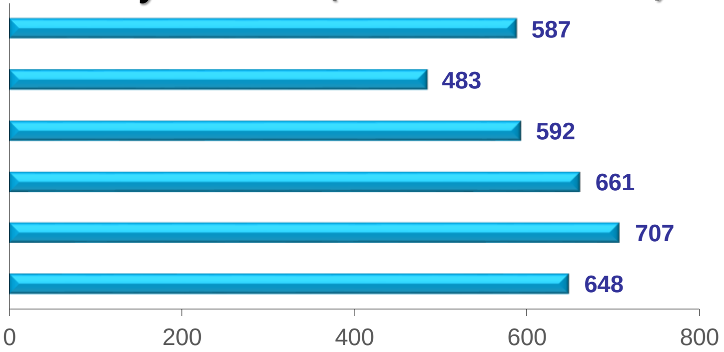
	17' 4Q	18' 1Q	18' 2Q	18' 3Q	18' 4Q	19' 1Q	19' 2Q	19' 3Q	19' 4Q	20' 1Q	20' 2Q	20' 3Q	20' 4Q	21' 1Q	21' 2Q	21' 3Q	21' 4Q	22' 1Q
LME	2,493	2,523	2,441	2,102	1,964	2,037	1,886	1,984	2,038	1,847	1,670	1,876	1,903	2,020	2,074	2,341	2,331	2,334
SMM	2,929	3,012	3,175	2,797	2,695	2,586	2,398	2,455	2,278	2,077	2,002	2,238	2,217	2,333	2,341	2,353	2,391	2,406
EPS	2.90	2.44	3.67	3.51	2.41	3.14	3.15	3.09	2.94	2.57	2.40	2.95	2.83	2.77	2.46	0.66	1.69	3.16

Sales Quantity by KL group

Monthly shipping q' ty(thousand pcs)

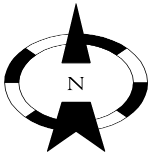


Monthly turnover(million NT dollars)



	2017	2018	2019	2020	2021	2022 1Q
Monthly shipping q' ty	2,119	2,288	2,024	2,020	1,544	1,625
Growth rate of shipping q' ty	5%	8%	-11%	-	-24%	5%
Monthly turnover	648	707	661	592	483	587
Growth rate of turnover	11%	9%	-7%	-10%	-18%	22%

Location

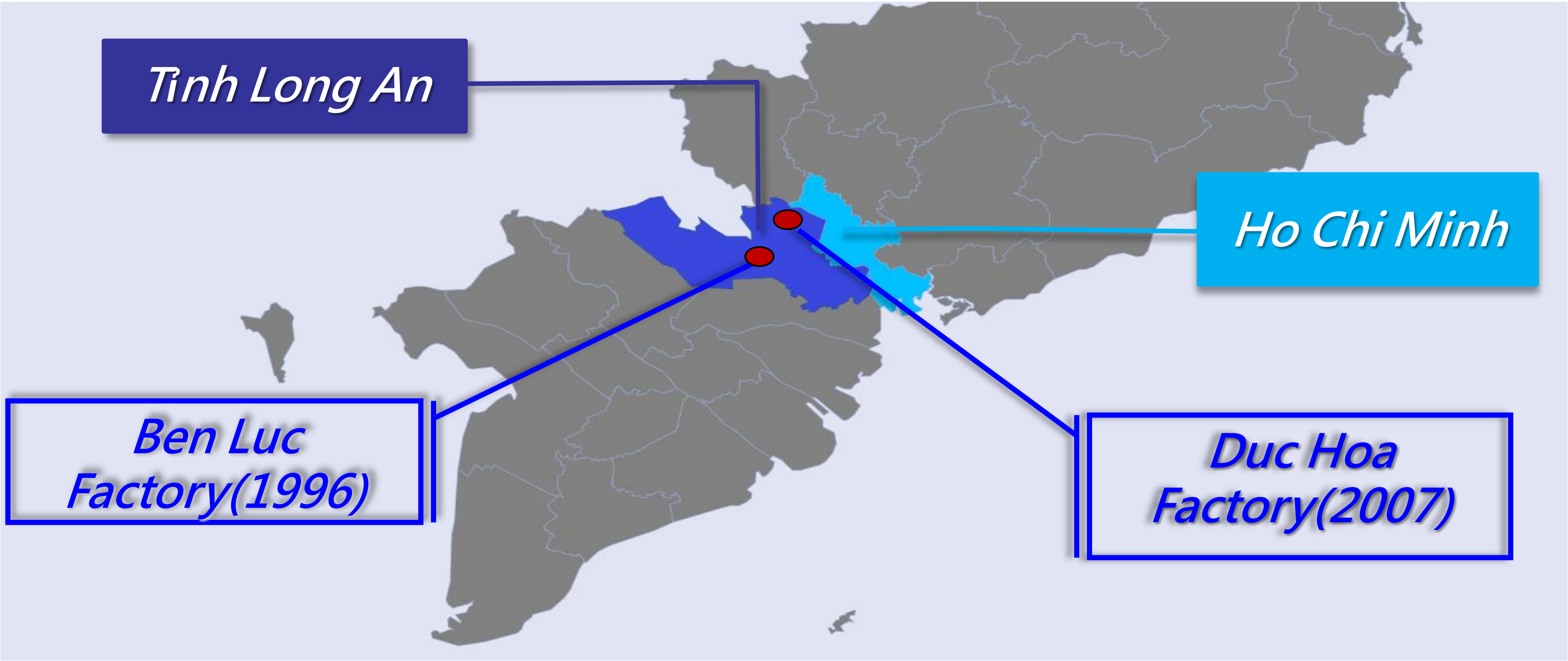


Hanoi Sale Office

Danang Sale Office

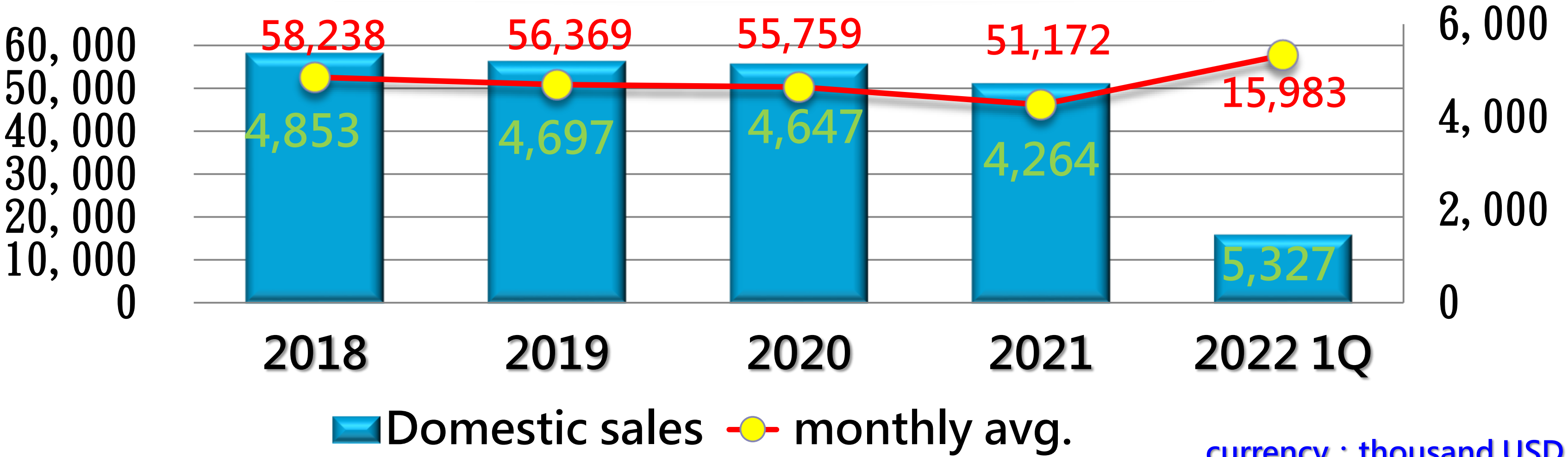
Ho Chi Minh Sale Office

Location



Tỉnh Long An
Ho Chi Minh
Ben Luc Factory(1996)
Duc Hoa Factory(2007)

Turnover of Le Long Vietnam



currency：thousand USD

Category	2018	2019	2020	2021	2022 1Q
Domestic sales	58,238	56,369	55,759	51,172	15,983
Domestic sales monthly AVG	4,853	4,697	4,647	4,264	5,327

Overview of Vietnam plant

Ben Luc plant

36,500 square meters

Overview of Vietnam plant

Ben Luc plant

36,500 square meters

Overview of Vietnam plant

Duc Hoa plant

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

Core value


Quality
Innovation
Cost
Power your life
LONG
Service
Delivery

KLB 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

Excellen t 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. /hen Chinese labor costs keep rising, RMB is under pressure for appreciation, and SLA industry is nited, Chinese battery manufacturers are forced to move to outside. However it' s difficult to find 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

Risk perspective

* Sustainable development on environment protection policy

* Right response to the fluctuation of lead price and cost

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.

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

HTP12100A/HTP12100AV0

Vincent Liu

Financial Senior Manager

Email: vincent@mail.klb.com.tw

TEL:+886-49-2254777