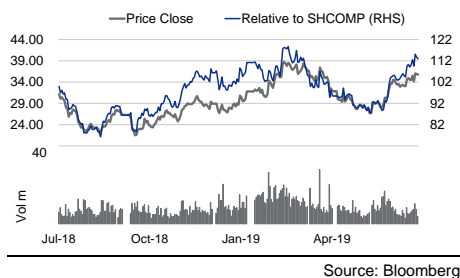


China
ADD

Consensus ratings*: Buy 20 Hold 1 Sell 0

Current price:	Rmb35.78
Target price:	Rmb43.00
Previous target:	N/A
Up/downside:	20.2%
CGS-CIMB / Consensus:	N/A
Reuters:	
Bloomberg:	300450 CH
Market cap:	US\$4,591m Rmb31,543m
Average daily turnover:	US\$35.48m Rmb243.6m
Current shares o/s:	882m
Free float:	52.7%

*Source: Bloomberg



Price performance	1M	3M	12M
Absolute (%)	16.8	4	13.2
Relative (%)	18.3	10	12

Major shareholders	% held
Wang Yanqing	47.3
Wang Denv	2.7
Stock Connect	2.4

Analysts
Kelly Zou

 T (852) 3698 6319
 E kellyzou@chinastock.com.hk

An Zhang, CPA

 T (852) 3698 6293
 E zhangnan@chinastock.com.hk

Wong Chi Man, CFA

 T (852) 3698 6317
 E cmwong@chinastock.com.hk

Wuxi Lead

Industry leader riding accelerating power battery equipment demand growth wave

- We initiate coverage on Wuxi Lead (Lead) with an **ADD** rating and a target price (TP) of **Rmb43.00**.
- As the industry leader, Lead is a key beneficiary of accelerating power battery equipment investment made or to be made by major OEMs in China and overseas markets from 2019 onwards.
- We expect Lead's EPS to grow at a CAGR of 38.8% in 2018–2020E. Lead currently trades at 29.8x/22.1x 2019E/2020E PER. We believe future new contract wins from major OEMs and/or leading power battery makers are the major share price catalyst.

Power battery equipment sector is an early-cycle beneficiary of faster demand growth from OEMs' NEV capacity development

In our [China EV battery sector report](#), published in April ([here](#)), we expected China's NEV and power battery sales volume to grow 30–40% p.a. in 2019–2020E vs. >50% growth in 2018. But the power battery equipment segment is an early-cycle beneficiary of faster demand growth, as major OEMs are developing their supply chains now to prepare for their NEV product offerings beyond 2020. We forecast that total power battery production capacity in China will rise >30% p.a. in 2019–2020E. We estimate total investment in power battery equipment in China could reach Rmb24–30bn p.a. in 2019–2020E. In overseas markets, we estimate major power battery producers will grow their power battery production capacity even faster by >55% p.a. in 2019–2020E. We thus estimate total investment in overseas markets could reach Rmb18–30bn p.a. in 2019–2020E.

An industry leader to enjoy domestic and overseas growth potential

The rise in China's NEV sales and local power battery producers has helped domestic power battery equipment companies gain market share from overseas competitors. Lead grew successfully with CATL, which accounted for >40% of its total revenue in 2018. Lead also broke into the supply chain of foreign power battery producers, like Tesla and LG Chem. Lead's market share in China grew from 7.3% in 2016 to 16.7% in 2018. We expect its market share to exceed 20% in 2020. With major international OEMs expected to develop their power battery capacity in overseas markets, Lead has an opportunity to expand into overseas markets with both power battery producers and international OEMs. It has won contracts to help develop new power battery capacity for CATL in Germany and Northvolt in Sweden.

Order and revenue growth visibility in 2019–2020 is high, but earnings growth is subject to pressure from SG&A costs

The lithium battery equipment business accounted for c90% of Lead's total revenue in 2018. We expect its lithium battery equipment business revenue to grow 34–35% p.a. in 2019–2020E. As at the end of 2018, its order backlog for lithium battery equipment stood at around Rmb5bn. The Company guided new contract wins to reach Rmb6–7bn in 2019E (>Rmb4bn already secured) and Rmb10bn in 2020E. Its capacity expansion in 2018–2019 should support revenue of Rmb8–10bn p.a. We expect its gross profit margin to expand in 2019–2020 due to an improving revenue mix. But we expect its SG&A costs to rise faster than revenue growth, led by an increase in the number of engineers for rising orders and R&D efforts. Overall, we expect its net profit to grow 42.7% YoY in 2019E and 34.8% YoY in 2020E.

Share price upside to be driven by new contract wins

We initiate coverage on Lead with an **ADD** rating and a TP of **Rmb43.00**, which is based on a target PER multiple of 30x (12-mth forward), implying ~0.7x PEG. We believe future order bookings might exceed market expectations, which should sustain earnings growth of >30% p.a. from 2019 onwards. We believe any share price weakness from short-term earnings volatility should provide a good entry point for investors.

Financial Summary	Dec-16A	Dec-17A	Dec-18A	Dec-19F	Dec-20F
Revenue (Rmbm)	1,079	2,177	3,890	5,164	6,883
Operating EBITDA (Rmbm)	350	647	898	1,280	1,712
Net Profit (Rmbm)	291	538	742	1,059	1,428
Core EPS (Rmb)	0.33	0.61	0.84	1.20	1.62
Core EPS Growth	99.7%	84.9%	38.1%	42.7%	34.8%
FD Core P/E (x)	108.5	58.7	42.5	29.8	22.1
DPS (Rmb)	0.13	0.23	0.28	0.32	0.43
Dividend Yield	0.36%	0.64%	0.78%	0.88%	1.19%
EV/EBITDA (x)	89.59	47.58	34.29	24.31	18.25
P/FCFE (x)	NA	NA	53.9	306.2	86.4
Net Gearing	(22.5%)	(26.8%)	(21.5%)	(10.1%)	(5.5%)
P/BV (x)	33.41	11.34	9.16	7.47	5.98
ROE	34.8%	28.8%	23.9%	27.6%	30.1%
% Change In Core EPS Estimates				0.96	0.99
CGIS / consensus EPS (x)					

SOURCE: CGIS RESEARCH, BLOOMBERG

China NEV demand growth facing headwinds in 2019–2020E

Power battery equipment demand growth is driven by rising NEV sales and associated demand growth for power batteries. In our latest [China EV battery sector report](#), published in April ([here](#)), we expressed concern about China's NEV sales and power battery demand growth in 2019–2020. We expect the fast-growing NEV market in China to face demand headwinds in 2019–2020 due to government subsidy cuts. We think real-demand growth for China's NEVs and power batteries in the long run will be supported by 1) more attractive upmarket offerings from the global OEMs, 2) lower battery prices and higher battery performance, and 3) better infrastructure support for EV ownership, such as the proliferation of charging stations.

With government subsidy cuts and still limited OEM NEV product offerings, 2019–2020 will be a transition period for the NEV industry. The central government cut subsidies with the intention of pushing OEMs and power battery producers for technology advances to attract end-users' attention from traditional ICE vehicles to NEVs. We expect China's NEV sales and production volume to grow 30–35% p.a. in 2019–2020E vs. >50% growth in 2018. For power battery demand, we expect sales volume to grow around 40% p.a. in 2019–2020E, also a slowdown from a CAGR of c100% in 2014–2018. China's NEV sales volume reached 0.62m units in 1H19, rising 49.6% YoY. With the 2019 version of the subsidy policy having taken effect on 25 June, China's NEV and power battery sales volume growth in 2H19 remains uncertain.

Figure 1: CGIS demand forecast for China's power battery market

Battery demand (GWh)	2016	2017	2018	2019E	2020E
<i>PV</i>	8.01	12.16	29.59	40.69	60.83
% YoY chg	138.4%	51.8%	143.3%	37.5%	49.5%
<i>Bus</i>	16.08	13.61	17.02	21.45	27.02
% YoY chg	79.1%	-15.4%	25.1%	26.0%	26.0%
<i>Specialized vehicle</i>	3.13	8.40	6.55	10.81	15.45
% YoY chg	68.3%	168.4%	-22.0%	65.0%	43.0%
BEV	27.22	34.17	53.16	72.94	103.30
% YoY chg	91.7%	25.5%	55.6%	37.2%	41.6%
<i>PV</i>	1.06	1.52	3.56	5.48	9.05
% YoY chg	17.8%	43.4%	134.2%	54.0%	65.0%
<i>Bus</i>	0.56	0.69	0.26	0.33	0.41
% YoY chg	27.3%	23.2%	-62.3%	26.0%	26.0%
PHEV	1.62	2.21	3.82	5.81	9.46
% YoY chg	20.9%	36.4%	72.9%	52.1%	62.8%
Total	28.84	36.38	56.98	78.75	112.76
% YoY chg	85.6%	26.1%	56.6%	38.2%	43.2%

SOURCES: CGIS RESEARCH, GGII

But power battery equipment companies are early-cycle beneficiaries of accelerating demand from NEV capacity development by major OEMs

But the power battery equipment segment is an early-cycle beneficiary of accelerating demand growth from major OEMs' ramping up their NEV product offerings. Major international OEMs will invest in the development of their NEV supply chains from 2019 onwards to prepare for the launch of new NEV products beyond 2020. We expect major battery equipment producers to benefit from rising equipment orders from both OEMs and power battery suppliers.

Based on CAAM data, NEVs accounted for a negligible percentage of global OEMs' overall sales volume in China in 2018 (Fig 2). Under government policy initiatives and/or their own business strategies, all major international OEMs have plans to intensively launch NEV products from 2020 onwards (Fig 3).

Figure 2: % of NEV sales volume to total auto sales volume by OEMs in China in 2018

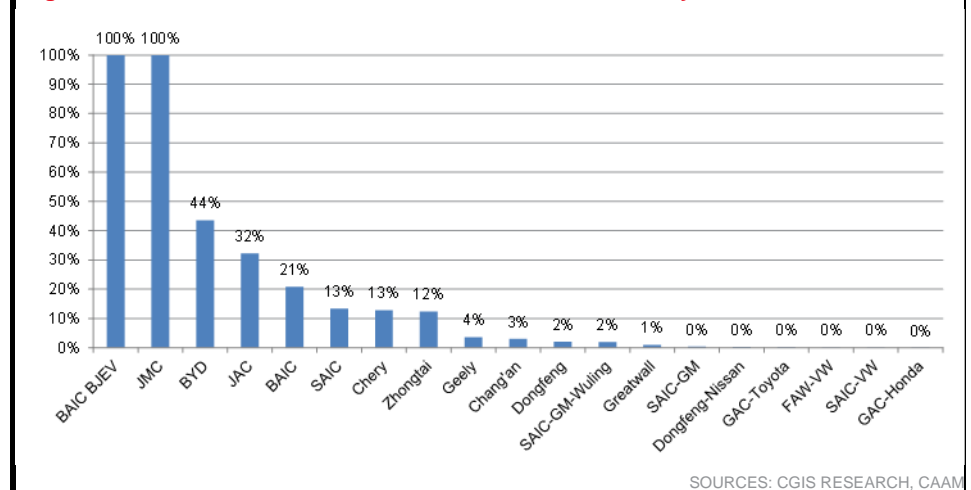


Figure 3: OEMs' NEV product rollout plan

Company	Number of NEV models in 2018	Number of new models in 2019-2022	Number of new models in 2022-2025	Total number of new models by 2025
VW	10	37	31	68
Ford	5	40	0	40
PSA	6	18	13	31
Toyota	2	24	5	29
Audi	3	10	10	20
GM	5	10	10	20
BMW	8	12	7	19
Renault-Nissan-Mitsubishi	6	14	3	17
Daimler	14	10	6	16
Jaguar Land Rover	3	11	3	14
Volvo/Geely	6	10	2	12
Hyundai/Kia	7	9	1	10
Porsche	2	5	0	5
Mazda	0	4	0	4
Tesla	3	1	1	2
Honda	2	1	0	1
Total	82	216	92	308

SOURCES: CGIS RESEARCH, T&E, COMPANY DATA

OEMs have been developing their NEV business supply chains since 2018. Power batteries account for >50% of the total production cost of a NEV, so major OEMs are keen to cultivate trustworthy power battery suppliers for their NEV product launches. With most of major international OEMs building their NEV product portfolio nearly from zero, demand for additional power battery production capacity could further accelerate from 2019 onwards.

Leading power battery producers are the main force behind OEMs' NEV supply chain development. CATL is the industry leader in China's power battery market. Smaller producers in China face challenges from CATL and other large foreign competitors, which enjoy 1) scalability to meet demand, 2) R&D capability, 3) cost competitiveness and 4) business relationships and acceptance by international OEMs. CATL has the most potential to become part of the global NEV supply chain, but it also faces more direct competition from Japanese and Korean companies. Apart from power battery producers, major OEMs intend to take the lead in NEV industry development, so these companies will also consider building power battery production capacity on their own.

Overall, we expect China's NEV and power battery sales volume to grow 30–40% p.a. in 2019–2020E, subject to some downside risk due to government subsidy cuts. But major OEMs' plans to ramp up their NEV product offerings beyond 2020 offers robust growth opportunities for power battery equipment producers in both China and overseas markets. We forecast that total power battery production capacity in China will rise >30% p.a. in 2019–2020E. We expect new power battery production capacity in China to reach 96–120GWh p.a. in 2019–2020E. The increase in new capacity will be mainly by major industry players (Fig 4). The price of one power battery production line in China ranges from Rmb200 to 250m/GWh, so we estimate total investment in power battery equipment in China could reach Rmb24–30bn p.a. in 2019–2020E. We see upside for these estimates, as they reflect only partial market information, and not all OEMs have confirmed their NEV product development plans.

Major power battery producers to drive the rapid growth of investment in battery equipment

Figure 4: CGIS estimates of China's power battery production capacity development

China battery equipment capacity forecast	2017	2018	2019E	2020E
China NEV production (th units)	810	1,219	1,585	2,120
YoY	56.7%	50.5%	30.0%	33.8%
China NEV battery demand (GWh)	36	57	79	113
YoY	26.1%	56.6%	38.2%	43.2%
China EV battery capacity forecast (GWh)	180	262	358	478
YoY	77.7%	45.6%	36.6%	33.5%
Utilization rate	20.2%	21.7%	22.0%	23.6%
Total China battery equipment demand (GWh)	79	82	96	120
Est. China battery equipment investment (Rmb bn)	17	21	24	30
Key power battery producers' capacity estimates (GWh)	2017	2018	2019E	2020E
CATL	17	31	47	68
BYD	16	26	40	60
Guoxuan	7	14	21	32
Lishen	10	14	15	20
LG Chem	0	3	9	15
Panasonic/Tesla	0	5	9	20
Samsung SDI	2	2	4	4
SK Innovation	0	0	0	8
Total	52	95	145	227
Est. incremental capacity (GWh)	2017	2018	2019E	2020E
CATL		14	16	21
BYD		10	15	20
Guoxuan		8	7	11
Lishen		4	1	5
LG Chem		3	6	6
Panasonic/Tesla		5	4	11
Samsung SDI		0	2	0
SK Innovation		0	0	8
Total		43	50	82

SOURCES: CGIS RESEARCH
 Note: Price of one power battery production line in China ranges between Rmb200-250m/GWh

Faster power battery production capacity growth overseas

In overseas markets, we estimate that major industry players (Fig 5) will grow their power battery production capacity by >55% p.a. in 2019–2020E. New additions of power battery production capacity will reach 46–75GWh p.a. in 2019–2020E. The price of one power battery production line in overseas markets is around Rmb400m/GWh, so we estimate total investment in overseas power battery capacity development could reach Rmb18–30bn p.a. in 2019–2020E, which is 0.75–1x of the power battery equipment investment in China.

Figure 5: CGIS estimates of overseas power battery production capacity development

Oversea power battery production capacity estimates (GWh)	2017	2018	2019E	2020E
LG Chem	18	31	42	70
Panasonic/Tesla	23	30	45	60
Samsung SDI	10	15	20	32
SK Innovation	2	5	20	32
Northvolt	0	0	0	8
Est. incremental capacity (GWh)	2017	2018	2019E	2020E
LG Chem		13	11	28
Panasonic/Tesla		7.5	15	15
Samsung SDI		5	5	12
SK Innovation		3	15	12
Northvolt		0	0	8
Total overseas power battery equipment demand		29	46	75
Est. oversea power battery equipment investment (Rmb bn)		11	18	30

SOURCES: CGIS RESEARCH, COMPANY DATA

Note: Price of one power battery production line in overseas markets is around Rmb400m/GWh

Potential upside for capacity growth

As major international OEMs are still in the early stage of NEV business development, our forecast is based only on current market information. There should be upside to our forecast once more OEMs firm up their NEV product development plans and accelerate their pace of developing their power battery production capacity.

Figure 6: Released OEMs' power battery capacity development plans

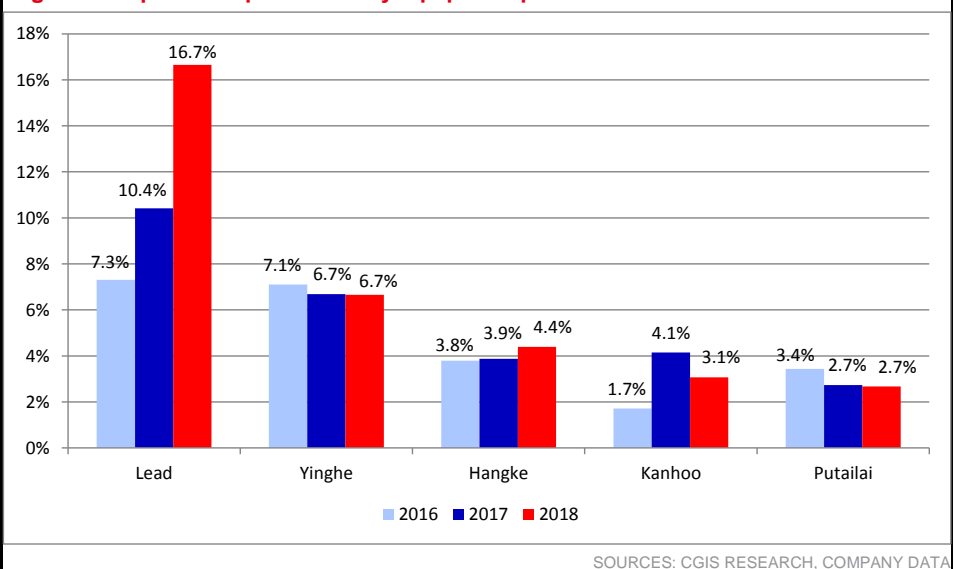
Major OEMs	Power battery capacity expansion plan
SAIC	CATL-SAIC JV, founded in May 2017, targets to have a power battery production capacity of ~8GWh by 2019 and ~36GWh by 2021.
Dongfeng	CATL-Dongfeng JV, founded in April 2018, targets to have a power battery production capacity of ~10GWh by 2020.
GAC	CATL-GAC JV, founded in July 2018, targets to have a power battery production capacity of ~10GWh in 2019.
Geely	Geely-LG Chem JV, founded in June 2019, targets to have a power battery production capacity of ~10GWh by 2021. Geely-CATL JV, founded in December 2018, targets to have a power battery production capacity of ~10GWh by 2021. Another 2 battery plants owned by Geely targets to have a power battery production capacity of ~6GWh by 2020.
Chang'an	BYD-Chang'an JV targets to have a power battery production capacity of 5GWh by 2019 and 10GWh by 2020.
BMW	BMW has 2 battery plants in Germany and 1 plant in China. The plant in Shenyang (China) targets to have a power battery production capacity of 15GWh by 2022.
Daimler	In Dec 2018, Daimler announced it is to invest US\$1.1bn into its 8 EV battery plants, which will be located in Germany, China, Thailand and US, respectively. Daimler also plans to build another 4 plants in Germany.
VW	VW-Northvolt JV, founded in June 2019, targets to have a power battery production capacity of ~16GWh in total. VW also invested Euro1bn into Northvolt for 20% equity stakes.
Toyota	In Apr 2018, Toyota's subsidiary "Primearth EV Energy" announced it is to invest US\$150mn into a new battery plant in Jiangsu, China. The plant targets to start operation from 1H2020. In Jan 2019, Toyota and Panasonic announced they will jointly build a battery JV for the R&D and manufacturing of EV battery. The plant is expected to be put into operation from 2020.

SOURCES: CGIS RESEARCH

Industry leaders expected to enjoy robust domestic and overseas market growth opportunities

The rise of China's NEV sales and the emergence of local power battery producers as industry leaders have helped local power battery equipment producers gain market share from their Japanese and Korean competitors. Lead, the industry leader, grew successfully with CATL, which accounts for >40% of its total revenue. Meanwhile, Lead also broke into the supply chain of overseas power battery producers, such as Tesla and LG Chem. Lead's market share in China's power battery equipment market has grown from 7.3% in 2016 to 16.7% in 2018. Based on GII data, the top five power battery equipment producers jointly controlled a 33.5% share of China's power battery equipment market in 2018 vs. 23.4% in 2016. With major international OEMs expected to develop their power battery capacity in overseas markets, Lead and other local producers will have an opportunity to expand into overseas markets.

Figure 7: Top 5 listed power battery equipment producers' market share in China



Strong bonding with CATL will help Lead expand its market share in China and overseas

With its strong bonding with CATL, Lead has the most potential to remain an industry leader in the domestic market and grow into overseas markets. Lead enjoys robust overseas growth opportunities with CATL and other foreign power battery producers. Compared to its domestic and overseas competitors, Lead has wider power battery equipment product coverage, ranging from front-, middle- and back-end power battery production processes (Fig 9). Its strength is in the middle- and back-end power battery equipment, whose value accounts for 60% of the total value of a power battery production line. With its R&D capability and accumulated know-how in power battery production, Lead should continue to remain at the top of the power battery equipment industry.

Figure 8: Key growth and profitability metric comparison: Lead vs. peers

Company	Revenue growth			Earnings growth			GPM			NPM			ROE		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
Lead	101.3%	101.8%	78.7%	99.7%	84.9%	38.1%	42.6%	41.1%	39.1%	26.9%	24.7%	19.1%	30.8%	19.3%	23.9%
Yinghe	132.9%	86.5%	31.6%	113.3%	76.4%	46.5%	35.9%	32.4%	32.8%	15.0%	14.2%	15.8%	21.6%	23.5%	11.6%
Hangke	59.0%	87.9%	43.9%	60.9%	96.5%	58.5%	45.2%	49.9%	46.7%	22.4%	23.4%	25.8%	29.8%	31.5%	36.4%
Kanhoo	101.1%	161.8%	6.9%	-140.6%	262.3%	-52.6%	13.7%	18.0%	15.7%	4.3%	6.0%	2.6%	3.2%	9.0%	4.0%
Putailai	81.8%	34.1%	47.2%	166.9%	27.7%	33.0%	34.5%	37.0%	31.9%	21.1%	20.1%	18.1%	43.1%	26.2%	20.4%
Nebula	60.5%	36.2%	-1.9%	69.1%	23.6%	-67.8%	50.1%	51.9%	45.3%	22.2%	20.2%	6.6%	25.6%	16.9%	4.8%
GMW	61.9%	67.4%	31.0%	80.1%	10.2%	-2.6%	33.6%	25.2%	25.9%	14.7%	9.7%	7.2%	23.2%	15.3%	10.6%

SOURCES: CGIS RESEARCH, COMPANY DATA, WIND

Figure 9: Key product offerings of major power battery equipment producers

Company	Stage 1 (Front-end, 40%*)			Stage 2 (Middle-end, 30%)			Stage 3 (Back-end, 30%)		
	Mixing Machine	Coating Machine	Compressing Machine	Winding Machine	Welding Machine	Electrolyte Filling Machine	Formation Machine	Grading Machine	Packaging Machine
Wuxi Lead	√	√	√	√	√	√	√	√	√
Yinghe Tech	√	√	√	√	√	√	√	√	√
Kanhoo Industry	√	√	√	√		√		√	√
Hangke Tech							√	√	
Putailai	√	√							
Golden Milky Way	√	√	√						
Nebula Elec							√	√	
Han's Laser		√							√
Hirano Tecseed		√							
CKD Corp				√					
PNT		√	√	√					

SOURCES: CGIS RESEARCH

Note: Specializations are highlighted in red.

*The percentage number represents proportion of investment in each process stage to total investment of one power battery production line.

Potential to gain market share through M&A

Lead's industry leadership should also be protected by its close relationship with CATL and other power battery producers (Fig 10). Meanwhile, we expect industry consolidation to continue. Top players like Lead have an opportunity to acquire smaller companies for either their products or their client relationships (Fig 11).

Figure 10: Partnership between power battery producers and equipment makers

Major Cell Makers	Coating Machine (Stage 1)	Winding Machine (Stage 2)	Formation/Grading Machine (Stage 3)
CATL	Kanhoo, Putailai, Yinghe	Lead	Lead
BYD	Kanhoo, Putailai, Yinghe	Lead, KOEM	Lead, Hangke
Panasonic	Kanhoo, Toray	Lead, Panasonic	Lead, Hangke
LG Chem	Kanhoo, Toray	Lead, Yinghe	Hangke
Samsung	Toray	Lead	Hangke
Northvolt	SECI	Lead	Lead

SOURCES: CGIS RESEARCH

Figure 11: Recent major acquisitions in the power battery equipment industry

Acquirer	Acquiree	Date	Ownership	Acquiree specialty	Deal size (Rmb m)
Wuxi Lead	Titan	2017	100%	Formation/Grading machine (stage 3)	1,350
Kanhoo Industry	Haoneng	2016	100%	Coating machine (stage 1)	450
Yinghe Tech	Areconn	2016	100%	Coating/Compressing/Winding machine (stage 1-2)	438
Han's Laser	Jinfa	2017	51%	Coating machine (stage 1)	33
Putailai	Xinjiatuo	2015	100%	Coating machine (stage 1)	57

SOURCES: CGIS RESEARCH

Order and revenue growth visibility is high, but earnings growth is subject to SG&A cost pressure

The lithium battery equipment business accounted for c90% of Lead's total revenue in 2018. As the industry leader, Lead should be a key beneficiary of rising power battery equipment investment from major OEMs and power battery producers from 2019 onwards. We expect its lithium battery equipment business revenue to grow 34–35% p.a. in 2019–2020E. As at the end of 2018, the order backlog of its lithium battery equipment business stood at around Rmb5bn. The Company guided new contract wins to reach Rmb6–7bn in 2019E and Rmb10bn in 2020E. Its capacity expansion in 2018–2019 should help revenue reach a maximum of Rmb8–10bn p.a.

Figure 12: Lead key revenue segment forecast

Rmb m	2015	2016	2017	2018	2019E	2020E
Lithium battery equipment	359	731	1,823	3,444	4,615	6,230
Photovoltaics equipment	140	288	232	264	301	331
Capacitor equipment	27	29	42	70	105	137
3C intelligent equipment	0	0	0	30	46	69
Others	10	31	80	82	98	117
Total revenue	536	1,079	2,177	3,890	5,164	6,883
% YoY						
Lithium battery equipment	136.8%	103.4%	149.3%	89.0%	34.0%	35.0%
Photovoltaics equipment	36.2%	106.3%	-19.5%	13.9%	13.9%	10.0%
Capacitor equipment	-43.9%	7.2%	48.7%	65.1%	50.0%	30.0%
3C intelligent equipment	na	na	na	na	50.0%	50.0%
Others	115.1%	202.4%	156.4%	1.9%	20.0%	20.0%
Total revenue	74.9%	101.3%	101.8%	78.7%	32.8%	33.3%
% of total						
Lithium battery equipment	67%	68%	84%	89%	89%	91%
Photovoltaics equipment	26%	27%	11%	7%	6%	5%
Capacitor equipment	5%	3%	2%	2%	2%	2%
3C intelligent equipment	0%	0%	0%	1%	1%	1%
Others	2%	3%	4%	2%	2%	2%
Total revenue	100%	100%	100%	100%	100%	100%

SOURCES: CGIS RESEARCH, COMPANY DATA

Given its improving revenue mix, we expect its gross profit margin to expand from 39.1% in 2018 to 41.1–41.5% in 2019–2020E. But SG&A costs are likely to rise faster than revenue growth, led by an increase in number of engineers for the rising number of new contracts and R&D. We expect its operating profit margin to expand from 22.0% in 2018 to only 23.7–24.0% in 2019–2020E. Overall, we expect its net profit to grow 42.7% in 2019E and 34.8% in 2020E.

We expect the Company to remain in a net cash position. We also expect its operating cash flow to improve from 2019 onwards, led by enhanced profitability. With no major plan to add more new capacity, we expect operating cash flow to remain positive in 2019–2020E.

Figure 13: Key financial ratios

Rmb m	2015A	2016A	2017A	2018A	2019E	2020E
Gearing						
Net debt/(Net Cash)	Net cash	Net cash	Net cash	Net cash	Net cash	Net cash
Net debt/equity	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash
Total debt	0	0	120	743	911	1,138
Efficiency						
AR days (bill receivables)	51	80	60	98	100	110
AR days (trade receivables)	98	56	91	75	80	90
AP days (bill payables)	212	168	220	182	190	200
AP days (trade payables)	210	156	132	140	150	160
Inventory turnover days	782	495	511	383	400	400
Cash conversion days	509	306	310	234	240	240
Growth						
Revenue growth	74.9%	101.3%	101.8%	78.7%	32.8%	33.3%
EBIT growth	116.9%	97.7%	86.6%	38.4%	43.5%	34.6%
Net profit growth	122.2%	99.7%	84.9%	38.1%	42.7%	34.8%
Profitability						
Gross margin	43.0%	42.6%	41.1%	39.1%	41.1%	41.5%
EBITDA margin	33.3%	32.4%	29.7%	23.1%	24.8%	24.9%
EBIT margin	31.2%	30.6%	28.3%	22.0%	23.7%	24.0%
Net profit margin	27.2%	26.9%	24.7%	19.1%	20.5%	20.7%
Dupont analysis						
Net profit margin	27.2%	26.9%	24.7%	19.1%	20.5%	20.7%
Total asset turnover	0.3	0.4	0.3	0.5	0.5	0.6
Leverage	2.4	2.6	2.4	2.4	2.5	2.5
*ROE	20.0%	34.8%	28.8%	23.9%	27.6%	30.1%
ROA	9.7%	13.7%	9.3%	10.1%	11.8%	14.1%
SG&A / Sales %	18.8%	17.1%	16.3%	17.2%	17.4%	17.6%
Effective tax rates	14.5%	13.0%	13.7%	11.5%	11.5%	11.5%
Total receivables/Sales	47.2%	51.1%	57.4%	62.8%	51.3%	71.1%
Total receivables/total assets	14.7%	22.8%	18.8%	29.0%	25.5%	37.5%
Current receivables/current assets	16.8%	26.4%	24.8%	37.2%	31.3%	44.1%
Total payables/COGS	153.2%	102.4%	143.4%	98.8%	109.3%	114.6%
Inventory/COGS	214.2%	165.6%	199.7%	101.8%	139.8%	113.5%
Free cash flow	-136	-29	-314	-38	-65	138

SOURCES: CGIS RESEARCH, COMPANY DATA

Lead's contract wins and revenue growth visibility are high. But earnings growth is subject to rising SG&A costs, so we ran an earnings sensitivity analysis for Lead to determine SG&A costs as a percentage of total sales. Based on our calculation, one ppt change in SG&A costs as a percentage of sales will impact our 2019E earnings forecast for the Company by 4.3%.

Figure 14: Sensitivity analysis: Lead's 2019E earnings to SG&A costs as a percentage of sales

SG&A as % of sales	2019E earnings	Change from base case	2018 earnings	% YoY chg
Base case (Rmb m)	1,059		742	
-13.6%	1,196	12.9%		61.1%
-14.6%	1,150	8.6%		54.9%
-15.6%	1,105	4.3%		48.8%
-16.6%	1,059	0.0%		42.7%
-17.6%	1,014	-4.3%		36.5%
-18.6%	968	-8.6%		30.4%
-19.6%	923	-12.9%		24.3%

SOURCES: CGIS RESEARCH, COMPANY DATA

Share price upside to come mainly from new orders

We initiate coverage on Lead with an **ADD** rating and set our TP at **Rmb43.00**. We forecast that its EPS will grow at a CAGR of 38.8% in 2018–2020E, led by its lithium battery equipment business. Our earnings forecast for Lead in 2019–2020E is largely in line with the Bloomberg consensus estimates.

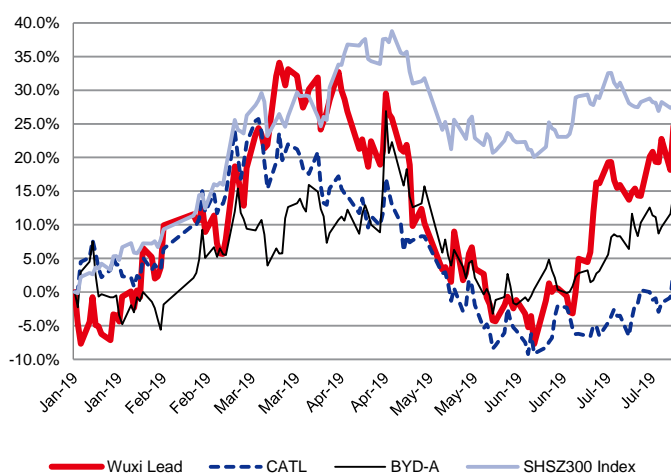
Figure 15: Lead earnings estimates: CGIS vs. consensus

2019E (Rmb m)	Sales	EBIT	EBITDA	Net profit	EPS Adj	EPS GAAP
CGIS	5,164	1,225	1,280	1,059	1.20	1.20
Consensus	5,180	1,283	1,286	1,093	1.24	1.24
Diff%						
CGIS vs. consensus	-0.3%	-4.5%	-0.5%	-3.1%	-3.2%	-3.4%
2020E (Rmb m)	Sales	EBIT	EBITDA	Net profit	EPS Adj	EPS GAAP
CGIS	6,883	1,650	1,712	1,428	1.62	1.62
Consensus	6,641	1,688	1,699	1,467	1.64	1.64
Diff%						
CGIS vs. consensus	3.7%	-2.3%	0.8%	-2.6%	-0.9%	-1.0%

SOURCES: CGIS RESEARCH, BLOOMBERG

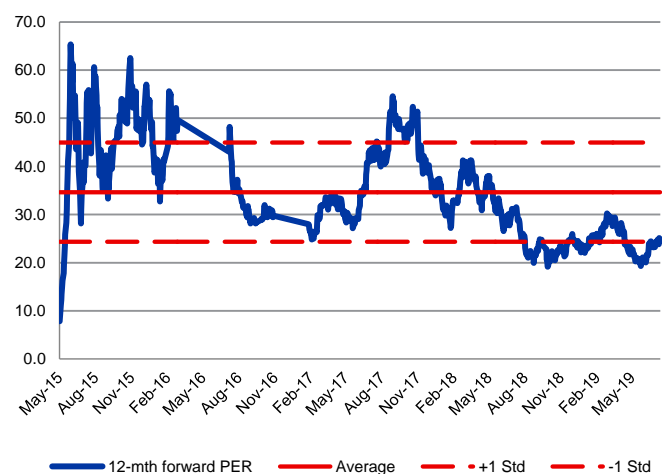
The auto sector and power battery sector have underperformed the market CYTD, led by market concern about a slowdown in NEV and power battery sales growth due to further government subsidy cuts. As an early-cycle beneficiary of OEMs' NEV capacity development, Lead has performed better than downstream power battery producers and OEMs, with a share price rise of 23.7% CYTD. Given its niche position in the lithium battery equipment industry and promising demand growth outlook for its core business, there is rising interest in the Company from northbound investors (Fig 18). The Company was also included in MSCI indices in May, which should help it gain more fund flows from foreign investors in the medium to long term. Currently, the stock trades at 29.8x 2019E and 22.1x PER vs. its historical trading average of 34.6x forward PER. The valuation does not look that demanding. The only concern is about its earnings growth in 2019–2020, which because of SG&A cost pressure, has some downside risk. But future order bookings might exceed market expectations, which should sustain the Company's earnings growth of no less than 30% p.a. from 2019 onwards. We think any share weakness from short-term earnings volatility should provide a good entry point for investors. Our TP is based on a target PER multiple of 30x (12-mth forward), implying around 0.7x PEG. We believe 30x is not an aggressive target compared with its historical range.

Figure 16: Share price performance CYTD – Lead vs. SZCOMP

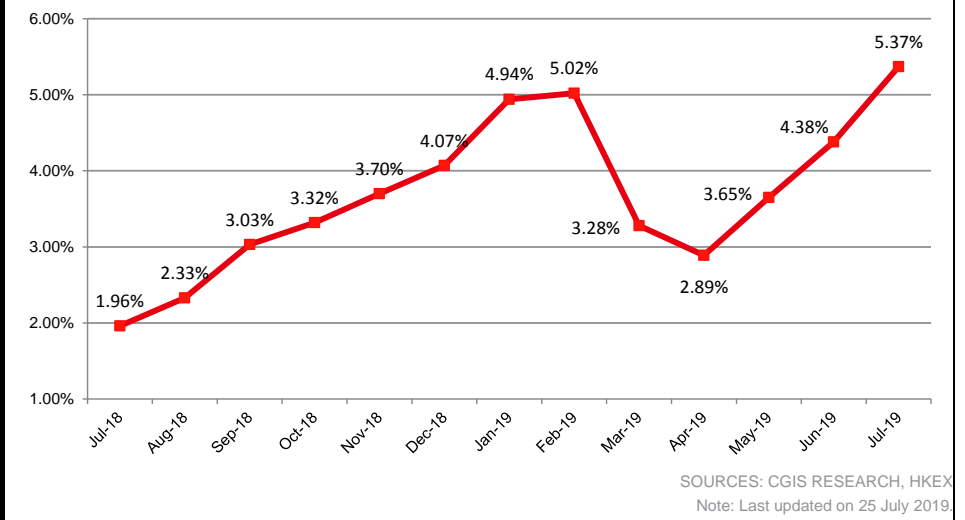


SOURCES: CGIS RESEARCH, BLOOMBERG

Figure 17: Lead's 12-mth forward PER band



SOURCES: CGIS RESEARCH, COMPANY DATA, BLOOMBERG

Figure 18: Northbound investors' equity stake in Lead

Figure 19: Peer comparison

	Ticker	Mkt cap US\$ m	Price (lc)	PER			EPS growth			PEG			P/B			Dividend yield			ROE		
				2018	2019E	2020E	2018	2019E	2020E	2019E	2018	2019E	2020E	2018	2019E	2020E	2018	2019E	2020E		
A-share battery equipment comp:																					
	Wuxi Lead	300450 CH	4,588	35.78	42.5	29.8	22.1	38.1%	42.7%	34.8%	0.7	9.2	7.5	6.0	0.8%	0.9%	1.2%	23.9%	27.6%	30.1%	
	Naura Tech	002371 CH	4,363	65.48	128.3	80.8	57.2	86.0%	58.8%	41.2%	1.4	8.5	7.7	6.8	0.1%	0.5%	0.7%	6.6%	9.5%	11.9%	
	Han's Laser	002008 CH	4,326	27.87	17.3	21.1	13.1	3.2%	-18.1%	61.1%	-1.2	3.5	3.1	2.6	0.7%	0.9%	1.3%	20.3%	14.7%	19.9%	
	Putailai New Energy	603659 CH	3,456	54.66	39.9	30.7	23.5	15.1%	30.1%	30.6%	1.0	8.1	6.6	5.3	0.1%	0.1%	0.1%	20.4%	21.6%	22.7%	
	Hangke Tech	688006 CH	3,156	54.10	67.6	na	na	-7.3%	na	na	na	21.4	na	na	0.8%	0.9%	1.0%	31.6%	na	na	
	Hongfa Tech	600885 CH	2,649	24.45	26.0	22.7	18.8	2.0%	14.8%	20.8%	1.5	4.1	3.6	3.1	1.2%	1.3%	1.5%	15.8%	15.8%	16.4%	
	Jingce Electronics	300567 CH	1,803	50.49	42.1	28.9	21.4	73.9%	45.6%	34.7%	0.6	10.5	7.9	6.0	0.7%	0.9%	1.2%	24.9%	27.4%	28.2%	
	Yinghe Tech	300457 CH	1,319	24.11	26.2	20.5	15.9	27.8%	27.9%	28.6%	0.7	3.0	2.7	2.4	0.7%	na	na	11.6%	13.3%	14.9%	
	Kanhoo Industry	300340 CH	441	14.30	52.4	20.6	15.4	-52.7%	154.6%	33.5%	0.1	2.1	2.1	1.9	0.1%	na	na	4.0%	10.2%	12.3%	
	Nebula Electronics	300648 CH	375	19.04	100.5	27.3	18.3	-63.2%	268.0%	49.2%	0.1	4.9	4.4	3.7	na	na	na	4.8%	16.2%	20.4%	
A-share automation companies																					
	Shenzhen Innovance	300124 CH	5,887	24.35	34.7	30.1	24.5	7.8%	15.6%	22.8%	1.9	6.5	5.5	4.7	0.0%	0.0%	0.0%	18.7%	18.2%	19.1%	
	Sanhua Intelligent	002050 CH	4,466	11.10	23.7	20.1	17.1	1.7%	17.9%	17.4%	1.1	3.5	3.2	2.9	0.8%	1.1%	1.3%	15.0%	16.0%	16.9%	
	Siasun Robot & Auto'	300024 CH	3,561	15.69	54.5	44.1	36.6	3.9%	23.6%	20.5%	1.9	3.8	3.6	3.3	2.4%	2.0%	2.3%	7.1%	8.2%	9.1%	
	Estun Automation	002747 CH	1,027	8.45	70.4	52.2	37.6	9.1%	35.0%	38.9%	1.5	4.4	4.0	3.7	0.0%	0.3%	0.4%	6.2%	7.7%	9.8%	
International peers																					
	Toray Industries	3402 JT	11,809	782	15.8	13.6	12.0	-17.3%	16.3%	12.7%	0.8	1.1	1.0	1.0	0.0%	0.0%	0.0%	7.0%	7.7%	8.2%	
	CKD Corporation	6407 JT	838	1,315	17.0	19.3	11.7	-47.6%	-12.0%	64.8%	-1.6	1.0	1.0	0.9	0.0%	0.0%	0.0%	6.0%	5.1%	7.9%	
	Hirano Tecseed	6245 JT	245	1,721	7.6	8.9	8.5	64.0%	-15.3%	5.1%	-0.6	0.9	na	na	2.0%	2.1%	2.3%	12.4%	na	na	

SOURCES: CGIS RESEARCH, COMPANY DATA, BLOOMBERG
 Note: Lead's numbers are based on CGIS estimates. Calculation is based on closing prices on 25 July 2019.

Risk factors

Government policy changes

China's NEV sales growth over the past decade was driven mainly by strong government policy and subsidy support. However, real demand growth is still hindered by 1) limited NEV product offerings by major international OEMs, 2) slow development of power charging facilities, and 3) high power battery prices. The central government started to cut subsidies in 2017 to push for NEV industry upgrades. We believe the subsidy cuts will put real demand growth of NEV under greater pressure in 2019–2020. Real demand growth is expected to kick in beyond 2020, led by major international OEMs' intensive NEV product launches and power battery cost reductions.

High concentration of revenue

CATL and its related parties represented 44.8% of Lead's revenue in 2018. This may imply Lead's business growth relies heavily on a single group of customers. Future new order growth could be hindered if 1) CATL switches to Lead's battery equipment competitors, and 2) CATL's capacity expansion in China and overseas markets is below market expectations.

Inventory risk

Lead's cash conversion cycle showed signs of recovery in 2018 (95 days in 2018 vs. 177 days in 2017), as inventory turnover days fell sharply from last year. However, it still took more than a year for Lead to convert its inventory to sales. As battery equipment is made according to different specifications for different customers, it is difficult to resell the finished products if a customer defaults. In its payment dispute with Gree Intelligent Equipment in 2018, Lead had to cut its prices ~20% of the contract value originally agreed by Gree and cancelled part of the deal because of Gree's inability to pay for all the orders it placed and the difficulty of reselling the finished customized equipment. Therefore, any worsening of inventory turnover could increase asset impairment risks for Lead.

R&D and talent retention

Battery equipment technology is still advancing. R&D will remain the most important factor for battery equipment companies' success in future market competition. One of the most important factors for their R&D leadership will be keeping talent. The loss of key R&D personnel will negatively impact the company's technology and product development. Any delay in Lead's R&D advances could hurt its relationship with its key customers, thereby resulting in a loss of market share to its competitors.

Overseas business expansion

As Lead is going to serve more international customers and potentially build plants in foreign countries in the coming years, there may be more business expansion risks arising from foreign exchange fluctuation, business licenses required by local governments, changes in local laws and regulations, political tension, hiring foreign employees, environmental issues, etc. Any of these risks if not handled properly, may have unfavorable consequences for the Company's overseas business.

Appendix

Company profile

Wuxi Lead Intelligent Equipment Co., Ltd (Lead) was founded in 2002 as a China-Japan joint venture between Lead Factory and Kyushu Machinery. Lead specializes in manufacturing high tech and intelligent equipment, including lithium battery equipment and assembly line, electronic capacitor and solar energy intelligent equipment. The Company went public in 2015, listing its shares on the Shenzhen Stock Exchange.

Lead started its business producing and supplying capacitor-making machinery in China. In 2008, it entered the lithium battery equipment market, focusing first on the front and middle end of the lithium battery equipment segment. It acquired Titan in 2017 to expand into the back end of the lithium battery equipment market. It expanded into the solar energy intelligent equipment market in 2009.

The lithium battery equipment business is the largest revenue contributor to Lead, representing around 90% of total revenue. With domestic power battery producers emerging as the industry leaders, Lead has become the largest lithium battery equipment producer in China. Based on GGII data, Lead's market share in the domestic lithium battery equipment market was estimated to be 16.7% in 2018. Lead's product strength is in the middle- and back-end lithium battery equipment segment (Fig 22). Its market share in domestic lithium battery winding machines, formation machines and grading machines in 2018 was estimated to be >80%. Lead's key customers include CATL, BYD, LG Chem and TDK Group and Gree Electric. CATL and its related parties comprised over 40% of Lead's total revenue in 2018. Lead is still in early stage of its overseas expansion. Overseas business accounted for 2% of its total revenue in 2018. The Company has the opportunity to become part of the global NEV supply chain by working with CATL and overseas power battery producers, including existing customers, like LG Chem and Panasonic, and new users, like Northvolt, which is gaining interest from major global OEMs like VW and BMW.

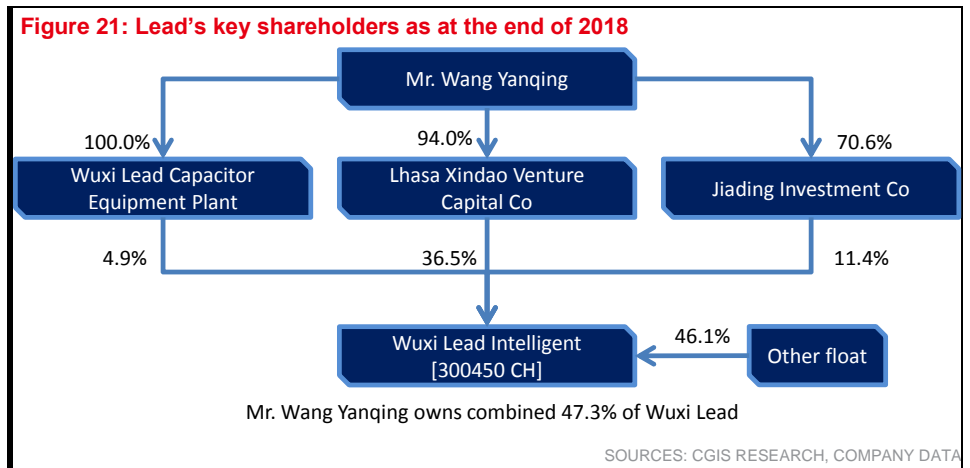
Figure 20: Key historical events

Year	Milestone
2002	Lead was founded in Wuxi, Jiangsu, China.
2004	Lead became supplier of TDK and EPCOS.
2008	Lead started its lithium battery product development and supplied winding machines to customers in the US.
2010	Lead developed lithium battery equipment for Sony.
2014	Lead became the top EV and 3C battery equipment manufacturer in China.
2015	Lead was listed on the Shenzhen Stock Exchange on May 18 2015.
2017	Lead acquired 100% of Titan Zhuhai Titan New Power Electronics.
2018	Lead formed strategic alliance with Northvolt, a Sweden EV battery manufacturer.

SOURCES: CGIS RESEARCH, COMPANY DATA

Key shareholder structure

As at the end of 2018, Mr. Wang Yanqing, the CEO of Lead, was the top shareholder of the Company, with a 47.3% equity stake. As at 25 July 2019, northbound investors held a 5.37% equity stake in the Company. On 14 May 2019, the Morgan Stanley Capital International (MSCI) Index announced the inclusion of Lead in the A-Share portfolio of 264 companies. According to a check of Shenzhen Stock Exchange data, foreign investor shareholdings in Lead must not exceed the 28% limit, or the trading of Lead will be halted until the ratio falls below the 28% limit.



Management profile

Mr. Wang Yanqing, aged 53, is the chairman and general manager of Lead, and the founder of the Company. Mr. Wang graduated from Changzhou Radio Industry School, where he majored in mold design and manufacturing.

Mr. Xu Gang, aged 43, has been the CFO of Lead since April 2017. He joined Lead in 2013. Before that, he was the CFO of Wuxi Murata Electronics Co., Ltd and the financial manager of a subsidiary of Jiangsu Springland International Holdings Co., Ltd.

Mr. Li Yufeng, aged 41, became the board secretary of Lead in March 2019. He was the head of investor relations at Noblilift Intelligent Equipment from May 2018 to March 2019. He was the board secretary, head of investor relations, head of strategy, and general manager of the investment team of Liao Ning Oxiranchem from 2011 to 2018.

Introduction of lithium battery equipment

There are three stages and over 50 processes involved in the production of power batteries (Fig 22–28). For each stage, there is a set of equipment to help perform individual tasks, composed of the so-called front-, middle- and back-end lithium battery equipment segments. Stage 1 involves mainly the mixing and coating of cathode and anode material. After the electrode sheets are coated and cut into shape, they enter Stage 2, which focuses on battery assembly. The key process in Stage 2 is the winding and stacking of electrode sheets and battery shell assembly. Depending on the battery shape, different assembly methods and machines are used. For cylindrical and prismatic batteries, winding machines are usually used to place the electrode sheets and separators. For pouch batteries, stacking machines are generally used. Entering Stage 3, the batteries are activated through the formation process and packaged as final products.

Domestic companies are dominant in middle and back end of the lithium battery equipment market. The front-end equipment segment (40% of the total lithium battery production line investment), especially coating machines, is dominated by Korean and Japanese producers, like Toray Industries, Hirano Tecseed and PNT. There are some Chinese companies, like Yinghe Tech, Kanhoo Industries and Putailai, which also supply coating machines. For the middle- and back-end lithium battery equipment segment, domestic companies like Lead and Yinghe are the market leaders.

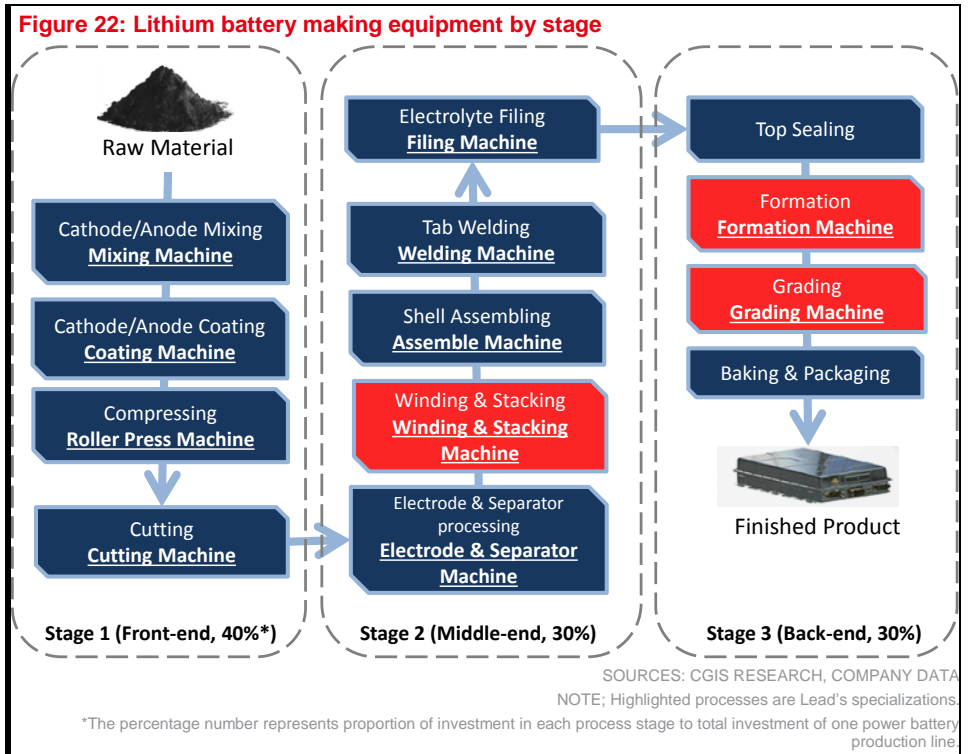
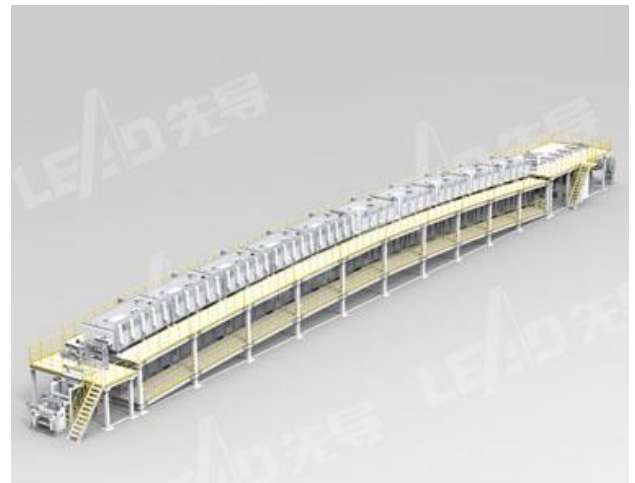


Figure 23: Lead mixing machine (front end)



SOURCES: CGIS RESEARCH, COMPANY DATA

Figure 24: Lead coating machine (front end)



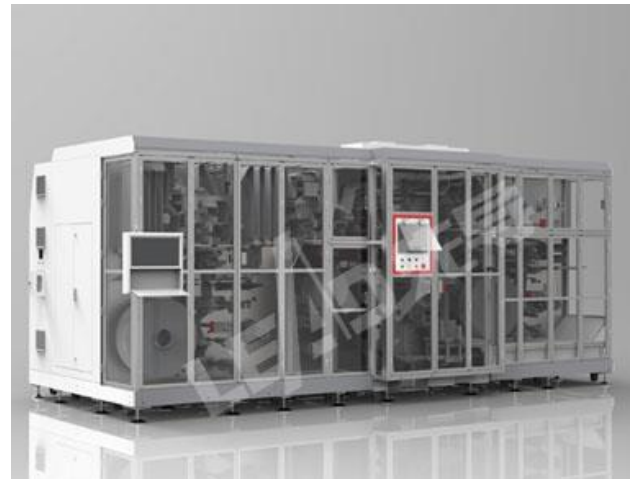
SOURCES: CGIS RESEARCH, COMPANY DATA

Figure 25: Lead electrode processing machine (middle end)



SOURCES: CGIS RESEARCH, COMPANY DATA

Figure 16: Lead winding machine (middle end)



SOURCES: CGIS RESEARCH, COMPANY DATA

Figure 27: Top sealing machine by Lead (back end)

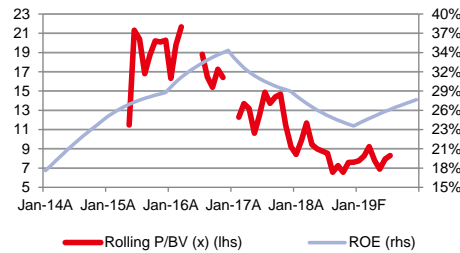
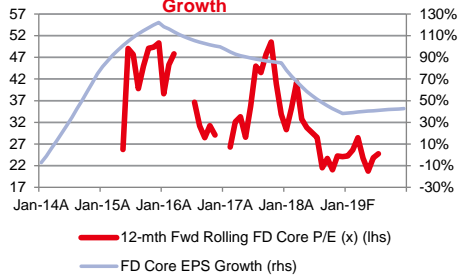


SOURCES: CGIS RESEARCH, COMPANY DATA

Figure 28: Formation/Grading machine (back end)



SOURCES: CGIS RESEARCH, COMPANY DATA

BY THE NUMBERS
P/BV vs ROE

12-mth Fwd FD Core P/E vs FD Core EPS Growth

Profit & Loss

(Rmbm)	Dec-16A	Dec-17A	Dec-18A	Dec-19F	Dec-20F
Total Net Revenues	1,079	2,177	3,890	5,164	6,883
Gross Profit	459	896	1,520	2,123	2,860
Operating EBITDA	350	647	898	1,280	1,712
Depreciation And Amortisation	(19)	(30)	(45)	(55)	(63)
Operating EBIT	331	617	854	1,225	1,650
Financial Income/(Expense)	4	6	(15)	(29)	(36)
Pretax Income/(Loss) from Assoc.	0	0	0	0	0
Non-Operating Income/(Expense)	0	0	0	0	0
Profit Before Tax (pre-EI)	334	623	839	1,197	1,614
Exceptional Items					
Pre-tax Profit	334	623	839	1,197	1,614
Taxation	(43)	(85)	(96)	(137)	(185)
Exceptional Income - post-tax					
Profit After Tax	291	538	742	1,059	1,428
Minority Interests	0	0	0	0	0
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	291	538	742	1,059	1,428
Recurring Net Profit	291	538	742	1,059	1,428
Fully Diluted Recurring Net Profit	291	538	742	1,059	1,428

Cash Flow

(Rmbm)	Dec-16A	Dec-17A	Dec-18A	Dec-19F	Dec-20F
EBITDA	349.7	647.3	898.5	1,280.1	1,712.4
Cash Flow from Inv. & Assoc.					
Change In Working Capital	(248.4)	(574.7)	(885.6)	(1,064.3)	(1,267.7)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	24.4	(19.8)	78.8	0.0	5.0
Net Interest (Paid)/Received	2.9	8.1	(8.3)	(28.8)	(41.4)
Tax Paid	(23.4)	(30.0)	(131.3)	(137.4)	(185.3)
Cashflow From Operations	105.2	30.9	(48.0)	49.6	223.1
Capex	(121.4)	(45.3)	(76.3)	(115.0)	(85.0)
Disposals Of FAs/subsidiaries	0.0	0.6	0.1	0.0	0.0
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(12.7)	(300.1)	86.2	0.0	0.0
Cash Flow From Investing	(134.1)	(344.9)	9.9	(115.0)	(85.0)
Debt Raised/(repaid)	0.0	120.0	623.9	168.4	227.1
Proceeds From Issue Of Shares	0.0	611.4	37.5	0.0	0.0
Shares Repurchased					
Dividends Paid	(75.1)	(54.3)	(128.4)	(246.9)	(278.7)
Preferred Dividends					
Other Financing Cashflow	0.0	(31.8)	214.7	0.0	0.0
Cash Flow From Financing	(75.1)	645.2	747.7	(78.4)	(51.6)
Total Cash Generated	(104.0)	331.3	709.7	(143.8)	86.5
Free Cashflow To Equity	(28.9)	(193.9)	585.8	103.0	365.2
Free Cashflow To Firm	(28.6)	(313.9)	(16.3)	(19.7)	194.8

SOURCES: CGIS RESEARCH, COMPANY DATA, BLOOMBERG

BY THE NUMBERS... cont'd

Balance Sheet

(Rmbm)	Dec-16A	Dec-17A	Dec-18A	Dec-19F	Dec-20F
Total Cash And Equivalents	213	867	1,483	1,340	1,426
Total Debtors	556	1,268	2,470	2,679	4,920
Inventories	1,027	2,559	2,413	4,253	4,566
Total Other Current Assets	291	352	190	190	190
Total Current Assets	2,086	5,046	6,556	8,461	11,102
Fixed Assets	201	305	538	604	631
Total Investments	0	0	0	0	0
Intangible Assets	107	1,257	1,254	1,249	1,244
Total Other Non-Current Assets	22	43	77	77	77
Total Non-current Assets	330	1,605	1,869	1,930	1,952
Short-term Debt	0	50	486	597	745
Current Portion of Long-Term Debt					
Total Creditors	694	1,985	2,777	3,794	5,177
Other Current Liabilities	772	1,674	1,245	1,245	1,245
Total Current Liabilities	1,466	3,708	4,509	5,635	7,167
Total Long-term Debt	0	70	257	315	393
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	5	64	64	64	64
Total Non-current Liabilities	5	134	320	378	457
Total Provisions	0	26	155	155	155
Total Liabilities	1,472	3,869	4,983	6,168	7,778
Shareholders' Equity	944	2,782	3,442	4,223	5,275
Minority Interests	0	0	0	0	0
Total Equity	944	2,782	3,442	4,223	5,275

Key Ratios

	Dec-16A	Dec-17A	Dec-18A	Dec-19F	Dec-20F
Revenue Growth	101%	102%	79%	33%	33%
Operating EBITDA Growth	96.2%	85.1%	38.8%	42.5%	33.8%
Operating EBITDA Margin	32.4%	29.7%	23.1%	24.8%	24.9%
Net Cash Per Share (Rmb)	0.24	0.85	0.84	0.49	0.33
BVPS (Rmb)	1.07	3.16	3.90	4.79	5.98
Gross Interest Cover	N/A	N/A	35.79	26.79	29.11
Effective Tax Rate	13.0%	13.7%	11.5%	11.5%	11.5%
Net Dividend Payout Ratio	18.2%	18.8%	33.3%	26.3%	26.3%
Accounts Receivables Days	55.92	90.75	75.38	80.00	90.25
Inventory Days	496.2	510.7	382.9	400.0	401.1
Accounts Payables Days	156.6	132.5	139.7	150.0	160.4
ROIC (%)	76.2%	83.8%	40.2%	42.0%	41.1%
ROCE (%)	39.9%	32.3%	24.4%	26.6%	28.8%
Return On Average Assets	13.9%	11.7%	10.0%	11.6%	12.5%

SOURCES: CGIS RESEARCH, COMPANY DATA, BLOOMBERG

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We are transferring the rating mechanism from "BUY, SELL, HOLD" to "ADD, REDUCE, HOLD". Please refer to the definitions below.

Explanation on Equity Ratings (Existing mechanism (will be replaced by new mechanism by 01/09/19))

BUY : share price will increase by >20% within 12 months in absolute terms

SELL : share price will decrease by >20% within 12 months in absolute terms

HOLD : no clear catalyst, and downgraded from BUY pending clearer signal to reinstate BUY or further downgrade to outright SELL

Explanation on Equity Ratings (New mechanism)

ADD : The stock's total return is expected to exceed 10% over the next 12 months.

REDUCE : The stock's total return is expected to fall below 0% or more over the next 12 months.

HOLD : The stock's total return is expected to be between 0% and positive 10% over the next 12 months.

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20/F, Wing On Centre, 111 Connaught Road Central, Sheung Wan, Hong Kong. General line: 3698-6888.