



碩禾電子材料股份有限公司
GIGA SOLAR MATERIALS CORP.

碩禾電子材料股份有限公司

2019年第3季法人說明會

Nov. 22, 2019

Cafer Huang



PresenterMedia





Safe Harbor Notice

- The statements of GSMC's current expectations included in this presentation are forward-looking statements subject to significant risks and uncertainties and actual results may differ materially from those contained in these forward-looking statements.
- GSMC undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.



Agenda

- 基本資訊
- 市場分析
- 3Q19 營運成果
- 3Q19 營運總結
- 市場展望
- Q&A



碩禾電子材料股份有限公司
GIGA SOLAR MATERIALS CORP.

基本資訊





合併架構



Giga Solar
Materials Corp.
(3691)

100%

Whole Sun
Green Power

50.39%

Green Energy
Electrode

100%

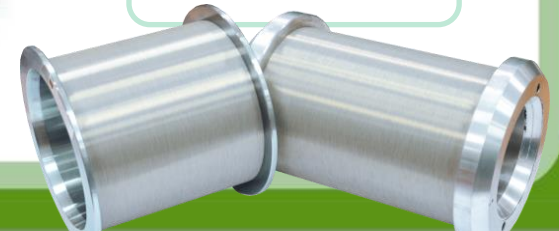
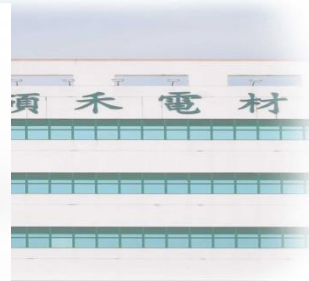
Yancheng Giga
Solar Materials

37.14%

Giga Diamond
Materials

100%

Yancheng
Giga Diamond
Materials





太陽能供應鏈

Upstream

Al / B-S Ag / F-S Ag Paste

GSMC (Al / B-S Ag / F-S Ag)

Competitors:

DuPont (B-S Ag / F-S Ag)

Heraeus (B-S Ag / F-S Ag)

Samsung (B-S Ag / F-S Ag)

Ruxing (Al)

Toyo (Al)

Upstream

Wafer

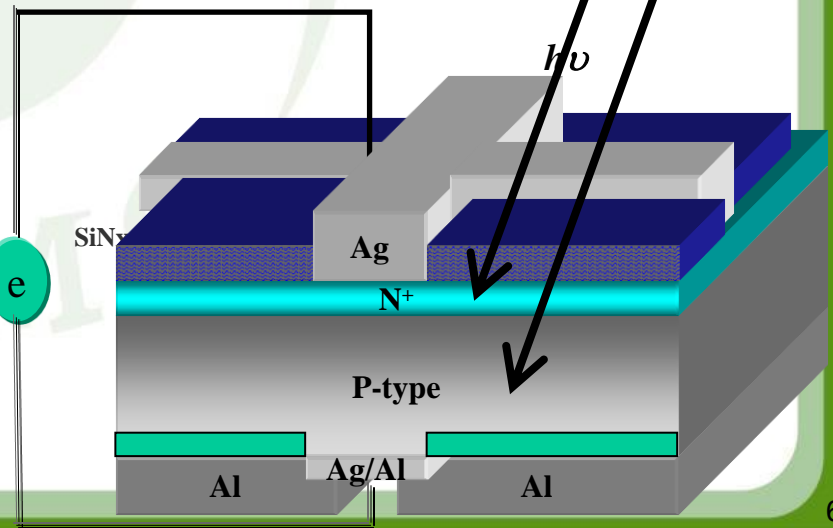


**Multi C-Si
Mono C-Si**



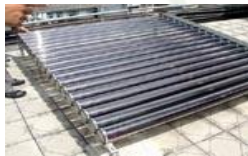
**Midstream
Solar Cells**

PV Cell Theory



Downstream

Module Assembly



Downstream

System Integration





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漿料產品

單/多晶

660A、B
高阻/高拉力

無網結

660A/B-K
(K系列)
調整塑型

DP

660B(D)
660B(U)

HJT

J380

Dual

530H/530I
660B-PF

TOPCon

920系列

PERC

L 317 系列
L 220 系列

Bifical

L 280 系列



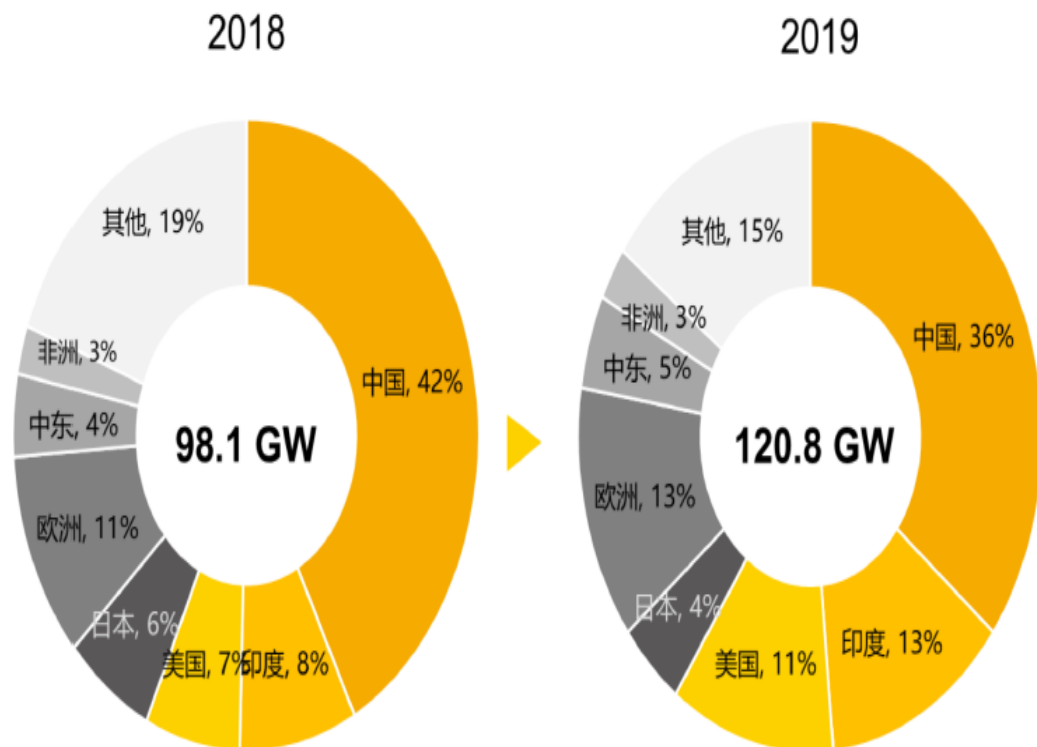
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GIGA SOLAR MATERIALS CORP.

市場分析



全球市場需求分析

2018-2019年全球组件需求预估



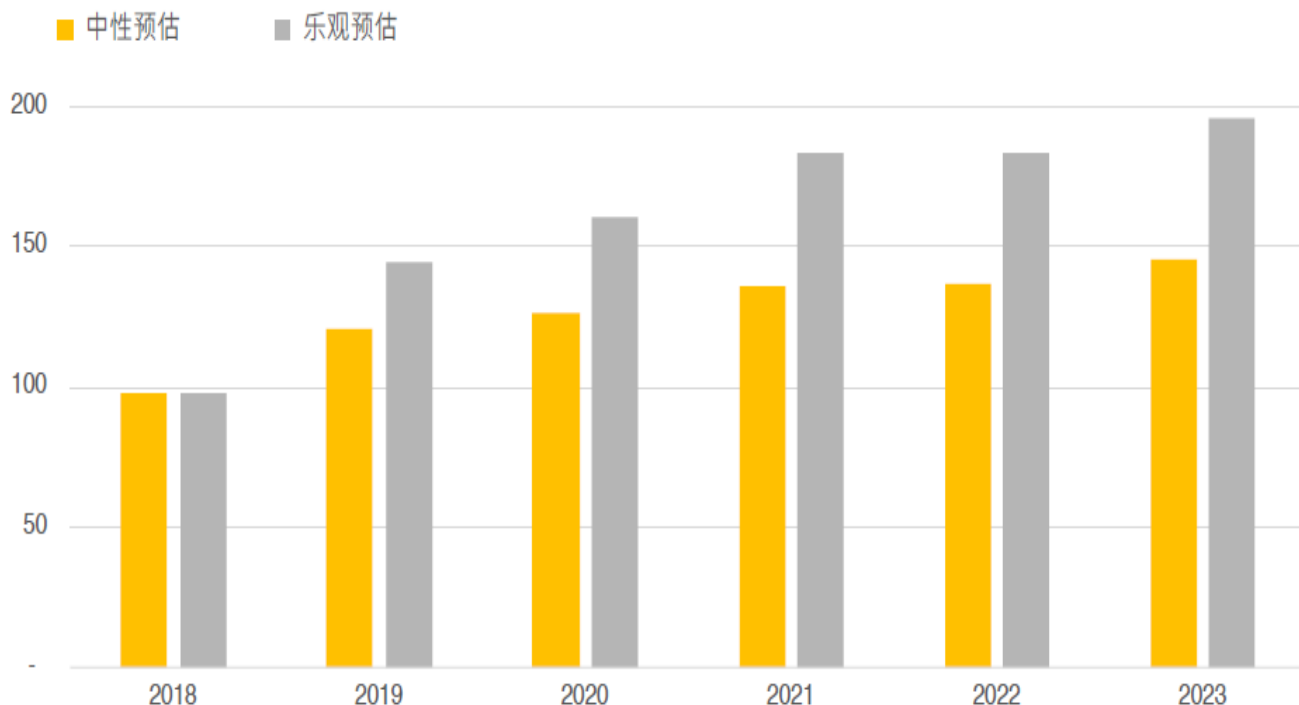
- 去年底中国内需与出口都显著增加，总计2018全年组件需求达到98.1GW。
- 2019年因为中国新政方向将改为竞价，PV InfoLink预估内需能到达43GW，但由于官方依旧还未正式公布2019的新政策，因此后续中国内需仍有不小的变数。
- 印度、美国、欧洲三大市场今年需求相比去年都进一步提升，部分新兴市场如巴西、埃及等也都可能较去年成长，整体海外市场动能明确。
- 综合目前已知的信息，**2019年的全球需求上看120.8GW，相较2018年增加了22.7GW，成长约23%。**
- 中国占全球的需求比重持续缩小，今年海外市场将占到全球约64%的比重。

Source:

長期太陽能市場需求穩定向上

- 光伏需求逐年成长，且目前看来2020年也是许多国家的政策节点，整体需求从2019下半年到2020年都会是需求旺盛的期间。若以乐观值来看，2020全球需求就有望挑战150GW。随后也持续逐年上升。浆料的市场总值依旧持续提升。

2018 – 2023全球光伏需求预估, Unit: GW



Source:



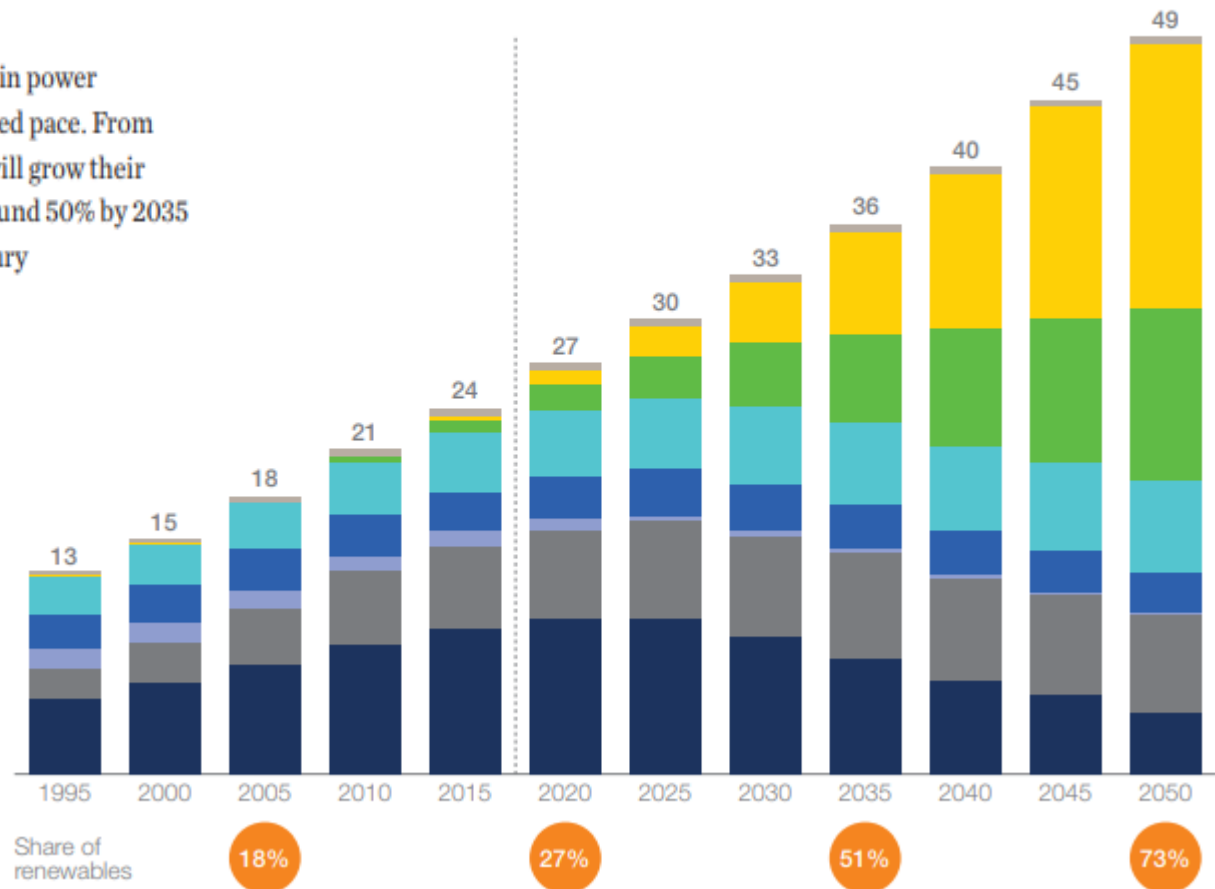
麥肯錫公司發布《全球能源視角2019》

Renewable generation accounts for more than 50% of power supply post-2035, a clear trend break from historical fossil fuel-based generation

Global power generation
Thousand TWh

Other¹ Solar Wind Hydro Nuclear Oil Gas Coal

- The role of renewable resources in power generation grows at an accelerated pace. From around 25% today, renewables will grow their share of global generation to around 50% by 2035 and to close to 75% by mid-century





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3Q19

營運成果





2019年第三季合併綜合損益表 與前一季比較

(新台幣仟元)

Account	3Q19	%	2Q19	%	QoQ %
Net Sales	1,755,951	100.00%	2,097,157	100.00%	-16.27%
Gross Profit	228,116	12.99%	294,925	14.06%	-22.65%
Operation Income	11,171	0.64%	102,379	4.88%	-89.09%
Non-Operation Income (Loss)	26,857	1.53%	(210,498)	-10.04%	-112.76%
Income (Loss) Before Tax	38,028	2.17%	(108,119)	-5.16%	-135.17%
Net Income (Loss)	18,931	1.08%	(74,297)	-3.54%	-125.48%
Shareholders of the Parent	82,252	4.68%	(27,423)	-1.31%	-399.94%
Non-Controlling Interests	(63,321)	-3.61%	(46,874)	-2.24%	35.09%
EPS	1.31		(0.45)		

Remark: 1.The Financial statement of 3Q19 was un-audited.

2.Outstanding shares of 3Q19 and 2Q19 were 63,675K shares and 60,989K shares, respectively.



2019年第三季合併綜合損益表 與去年同期比較

(新台幣仟元)

Account	3Q19	%	3Q18	%	YoY%
Net Sales	1,755,951	100.00%	1,909,292	100.00%	-8.03%
Gross Profit	228,116	12.99%	138,381	7.25%	64.85%
Operation Income (Loss)	11,171	0.64%	(33,068)	-1.73%	-133.78%
Non-Operation Income (Loss)	26,857	1.53%	(392,367)	-20.55%	-106.84%
Income (Loss) Before Tax	38,028	2.17%	(425,435)	-22.28%	-108.94%
Net Income (Loss)	18,931	1.08%	(383,550)	-20.09%	-104.94%
Shareholders of the Parent	82,252	4.68%	(315,688)	-16.53%	-126.05%
Non-Controlling Interests	(63,321)	-3.61%	(67,862)	-3.55%	-6.69%
EPS	1.31		(5.24)		

Remark: 1.The Financial statement of 3Q19 was un-audited.

2.Outstanding shares of 3Q19 and 2Q19 were 63,675K shares and 60,989K shares, respectively.



合併資產負債表 2019.9.30

(新台幣仟元)

Account	2019.09.30	%	2019.06.30	%	QoQ%
Current Assets	7,187,006	55.52%	9,120,929	60.69%	-16.87%
Non-Current Assets	5,757,869	44.48%	5,908,101	39.31%	-2.20%
Total Assets	12,944,875	100.00%	15,029,030	100.00%	-11.39%
Current Liabilities	3,211,497	24.81%	5,149,665	34.26%	-25.65%
Non-Current Liabilities	4,215,538	32.57%	4,304,460	28.64%	-1.67%
Total Liabilities	7,427,035	57.37%	9,454,125	62.91%	-15.75%
Equity Attributable to Shareholders of Parent	4,828,721	37.30%	4,715,584	31.38%	2.46%
Non-Controlling Interests	689,119	5.32%	859,321	5.72%	-20.57%
Shareholders' Equity	5,517,840	42.63%	5,574,905	37.09%	-1.05%
Total Liabilities and Shareholders' Equity	12,944,875	100.00%	15,029,030	100.00%	-11.39%

Remark: 1.The Financial statement of 3Q19 was un-audited.

2.Outstanding shares of 3Q19 and 2Q19 were 63,675K shares and 60,989K shares, respectively.



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3Q19

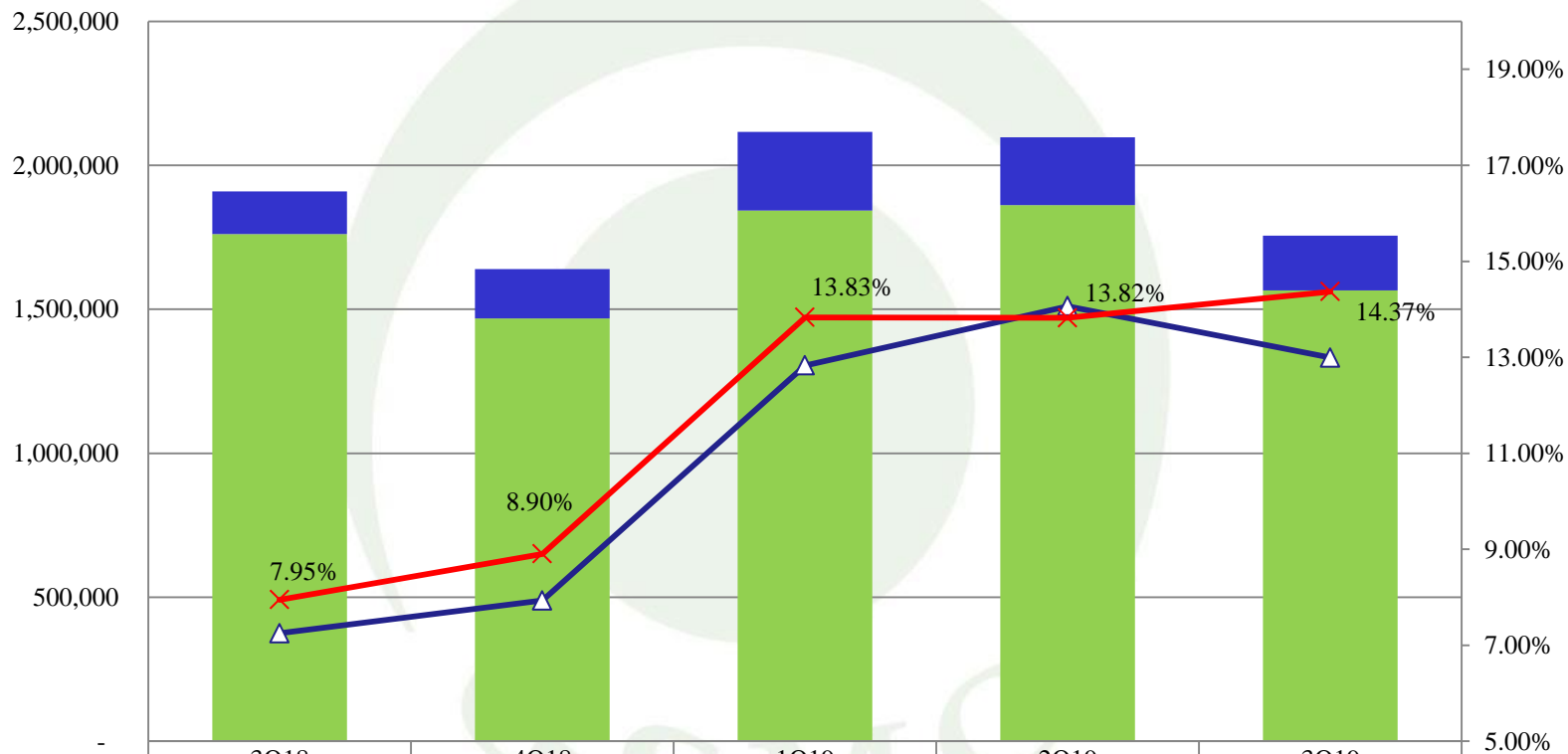
營運總結





合併季營收及毛利率

(新台幣仟元)

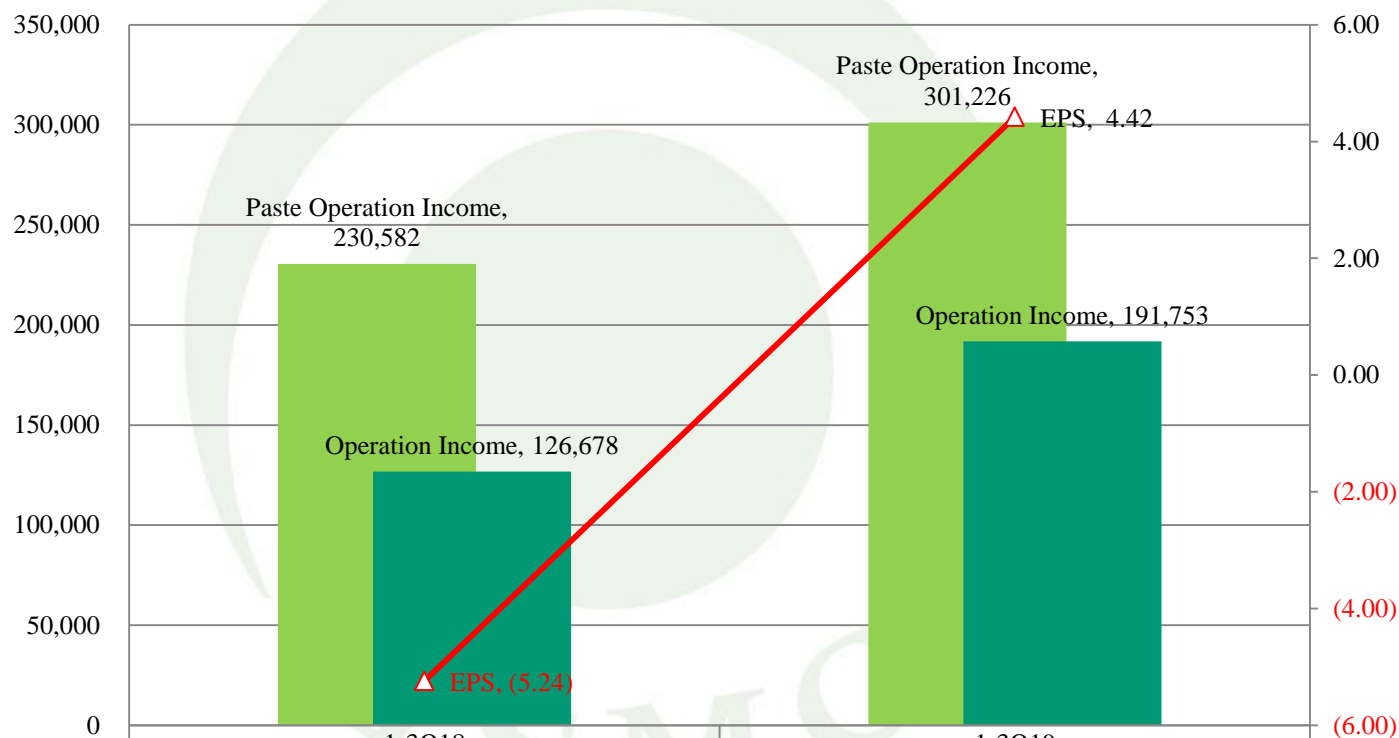


Other Revenue	147,714	172,031	273,144	234,960	190,813
Paste Revenue	1,761,578	1,467,787	1,842,902	1,862,197	1,565,138
Total GM%	7.25%	7.93%	12.83%	14.06%	12.99%
Paste GM%	7.95%	8.90%	13.83%	13.82%	14.37%



合併前三季營業利益及每股盈餘比較

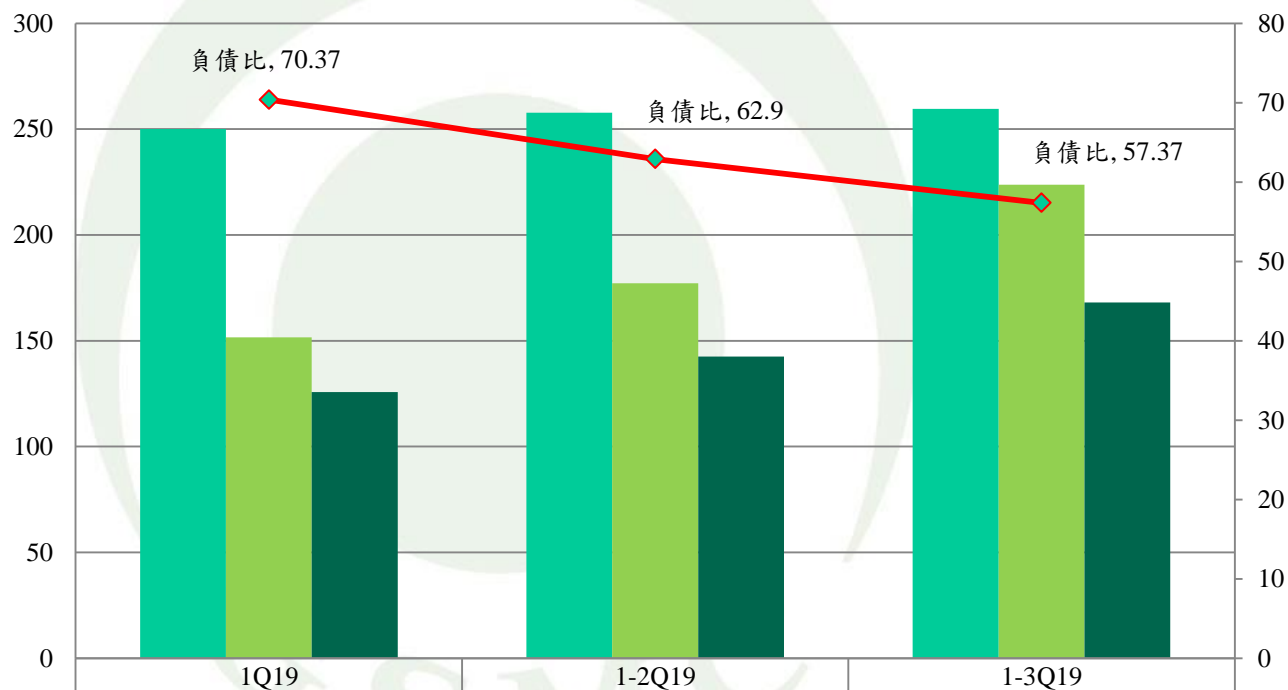
(新台幣仟元)



Paste Operation Income	230,582	301,226
Operation Income	126,678	191,753
EPS	(5.24)	4.42



財務比率比較



長期資金占固定資產比率	250.09	257.83	259.55
流動比率	151.68	177.11	223.78
速動比率	125.69	142.61	168.09
負債占資產比率	70.37	62.9	57.37



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市場展望





2020市場展望

- Paste-
 - Continuously steady growth.
- Solar Plant
 - Downsizing: sale of non-profit solar projects.
 - Keep the fixed income projects.

福島電廠	1-3Q19	1-3Q18
認列投資收益 (NT:K)	62,033	55,730

- DW-
 - Cost reduction continuously.
 - Activating Strategies of the Fixed assets: Product improvement and R&D team enhancement.



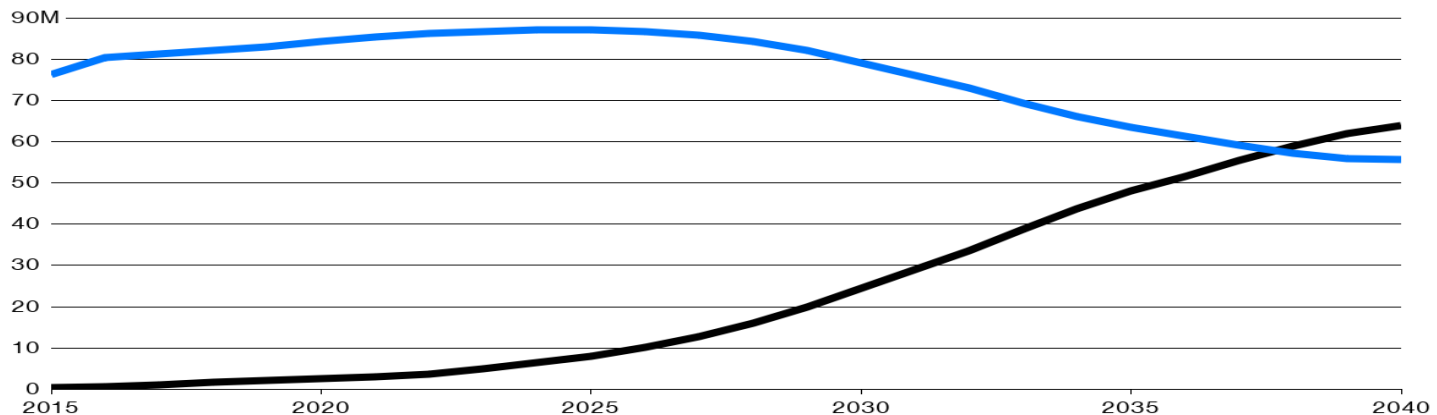
2020市場展望

- Battery Material:
 - FeLiPO₄-Massive production
 - Si Anode-Sample delivering
 - Target market: Electric vehicles, wearables devices, and energy storage systems.

Overtaking Lane

Electric vehicle sales will surpass internal combustion engine sales by 2038

■ Electric vehicles ■ Internal combustion engine



Source: Bloomberg New Energy Finance



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2020市場展望

- 交通部估投入300億元！目標2030年巴士全面電動化





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Thank you for your attention!

GSMC