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China

Small caps

XYG beat, XYS miss

Profit alerts imply mixed performance

Xinyi Glass (XYG) and Xinyi Solar's (XYS) profit alerts for 2016 both imply robust growth; but while XYG looks set to beat our forecast by c.4%, XYS could miss by c.7%. Still, we believe the stocks' recent corrections have priced in demand/supply concerns and we think natural gas/soda ash cost hikes are manageable. We see a fairly stable float-glass outlook in 2017 and lift our XYG target from HK\$8.30 to HK\$8.35; BUY. We also remain long-term BUYers on XYS, despite cutting our target from HK\$3.90 to HK\$3.50, as we wait for more signs of industry improvement.

XYG – c.4.2% beat to CL

- XYG expects 2016 profit to grow 40-55% YoY from HK\$2,113m in 2015, which translates to HK\$2,958-3,275m. Assuming no non-core, this implies 71-89% YoY core profit growth and an avg c.4.2% beat to CL and largely in line with consensus.
- Key reasons for growth are: 1) full-period contribution of natural gas price cut in Nov-15; 2) float glass ASP rebound, especially in 2H16; 3) rising float glass sales volume amid capacity increase; and 4) profit growth of associate XYS.

XYS – c.7.0% miss to CL

- XYS expects its 2016 profit to grow 50-65% YoY from HK\$1,206m in 2015, which translates to HK\$1,808-1,989m. Assuming no non-core, this implies 58-74% YoY core profit growth and an avg c.7.0% miss to CL and c.6.1% miss to consensus.
- Key reasons include: 1) solar glass ASP rebound in 1H16 and natural gas price cut offset by weaker ASP in 2H16; 2) c.10% YoY growth in solar glass/back glass sales volume (CL: c.27%), mainly on weak 2H; offset by 3) higher solar farm income.

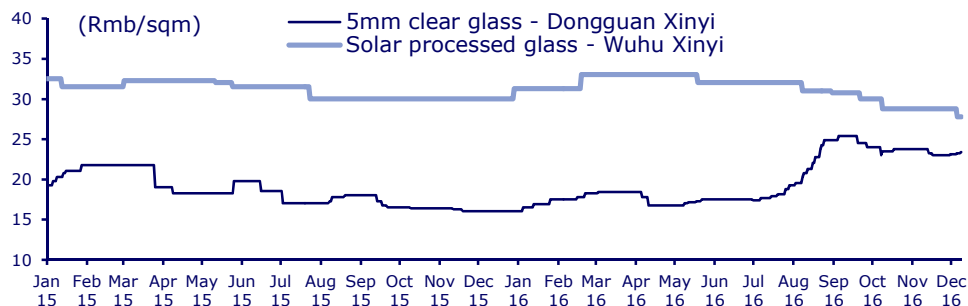
Recent weak sentiment offers opportunity

- XYG and XYS share prices have corrected c.18-26% from peak, which we believe is due to: 1) concerns over weakening demand and new supply; 2) NG and soda ash cost hikes; 3) impact on exports to US after Trump's victory; 4) FiT cut for solar.
- For XYG, we expect relatively balanced float glass demand/supply in 2017, as property restrictions are focused and we see limited new supply from here.
- For XYS, we think solar glass ASP could stay low as leaders keep squeezing small players. But with prices close to market breakeven, we see little further downside.
- NG price hike is only seasonal and negotiable, but transmission tariff reform will help. XYG/XYS also import soda ash; thus domestic cost hikes have less impact.

Valuation undemanding

- XYG trades at 6.8x 17CL PE with a 6.4% 16CL div yield and XYS at 8.1x 17CL PE with a 5.1% 16CL div yield. We think most risks have been priced in.
- We lift XYG 16/17/18CL core profit by c.4.2%/1.2%/0.8% mainly on higher float glass ASP/GPM. We raise our TP from HK\$8.30 to HK\$8.35.
- We cut XYS 16/17/18CL core profit by c.7.3%/8.1%/5.1% on lower solar glass sales volume and solar farm capacity. We trim our TP from HK\$3.90 to HK\$3.50.

XYG/XYS: Float glass and solar glass price performance



Source: CLSA

Profit alert implies -1.1% miss to 9.5% beat for 2016 profit

XYG – c.4.2% beat to CL

XYG estimates its 2016 profit to grow 40-55% YoY from the reported HK\$2,113m in 2015. This translates into HK\$2,958m-3,275m reported profit in 2016. Assuming no non-core, this suggests a -1.1% miss to 9.5% beat to our core profit forecast of HK\$2,992m (average c.4.2% beat), or -5.5% miss to c.4.6% beat to Bloomberg consensus (average -0.5% miss).

Excluding the HK\$379m non-core gains (gain from XYS's placement, fair value gain, FX), core profit was HK\$1,734m in 2015. The above profit range implies c.71-89% YoY growth in 2016 core profit.

Major reasons for the profit jump include: 1) full-period contribution of natural gas price cut in Nov-15; 2) float glass ASP rebound especially in 2H16; 3) rising float glass sales volume amid capacity increase; and 4) significant profit growth of associate XYS, in which XYG has a 29.53% stake.

Figure 1

XYG – 2016 profit alert

HK\$m	2015		2016			2015		2016	
	Reported profit	Estimated YoY growth	Estimated reported profit	CL original core profit forecast	% beat/miss to CL	CL core profit	Implied core profit YoY growth	Bloomberg consensus	% beat/miss to Bloomberg
Lower end	2,113	40%	2,958	2,992	(1.1%)	1,734	70.6%	3,131	(5.5%)
Upper end	2,113	55%	3,275	2,992	9.5%	1,734	88.9%	3,131	4.6%
Mid-range	2,113	48%	3,117	2,992	4.2%	1,734	79.8%	3,131	(0.5%)

Source: Company, CLSA

Market concerns on property-driven demand, capacity addition, but we expect fairly stable D/S outlook

Cost hike is also manageable

Trump's import policy is uncertain

Weak sentiment, but risks should be priced in

Share price of XYG corrected c.18% from peak. We saw investors' concern on property market, new capacity and recent cost hike. Meanwhile, as we stated in our 8 November 2016 note, [Xinyi Glass - BUY \(Concerns priced in\)](#), we expect a relatively balanced float glass demand/supply in 17CL, given property restrictions are more focused in specific regions, and further restart/brand new capacity are limited from here. In terms of cost, recent natural gas price hike is likely seasonal adjustment to balance winter demand, with the actual hike subject to negotiation. On the other hand, soda ash price did increase quite a bit recently due to rising transportation cost and suspension of production of some soda ash producers, but that's likely short-term impact, and XYG will also import soda ash from overseas so that overall impact to the company is less material.

Another concern from investors was the potential trade restriction from the US after Trump's victory. For XYG, sales to North America contributes c.13% of sales, which should be mainly auto glass products, i.e. we can assume c.38% of auto glass sales come from US. In that case, 1% decline in US sales could reduce 17CL profit by only 0.3%. Recent increase in export VAT rebate should help offset.

Trading at 6.8x 17CL PE with a c.6.4% 16CL dividend yield, we believe most risks have been priced in.

National average float glass pricing picked up YTD, and started to decline amid seasonal weakness

Figure 2

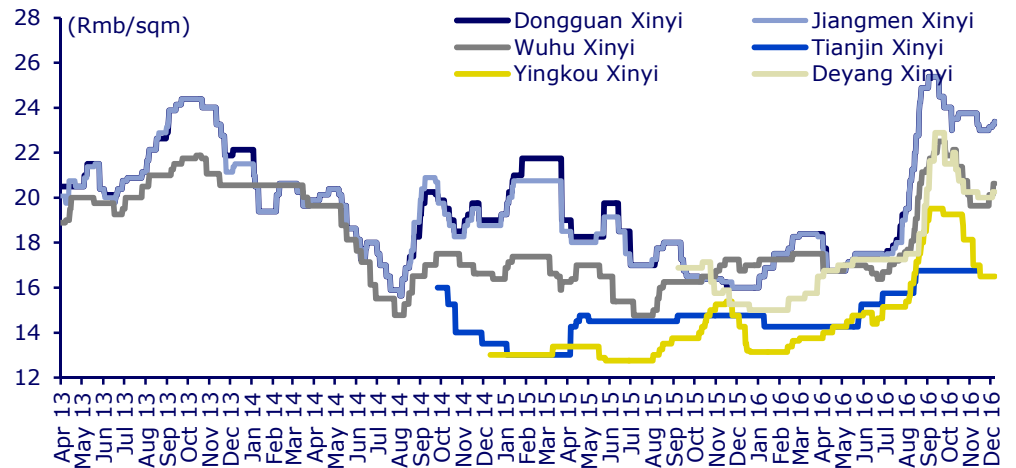
Float glass prices in various regional markets across China



Source: WIND, CLSA

Figure 3

XYG's float glass product price quotes (5mm clear glass)

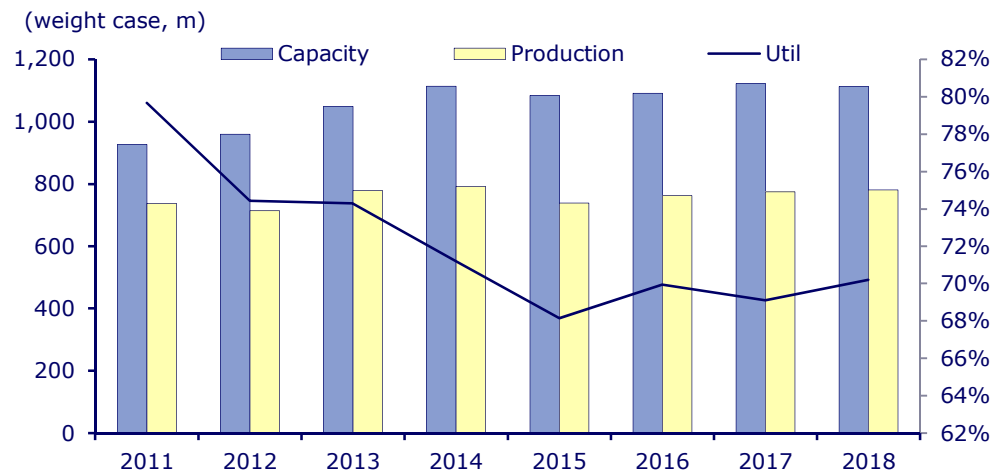


Source: SCI99.com, CLSA

We expect fairly stable demand/supply dynamics in 2017

Figure 4

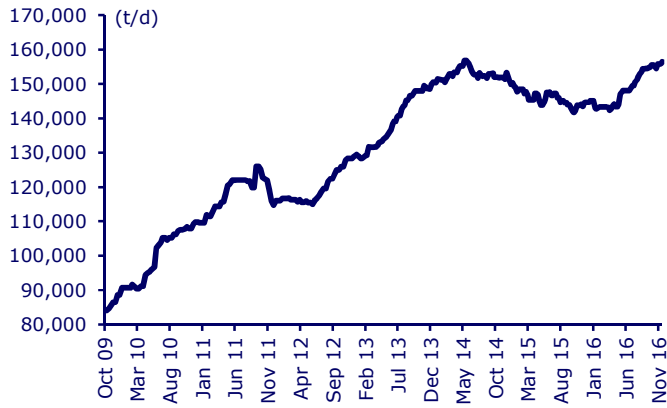
Float glass demand/supply dynamics



Source: CLSA

Figure 5

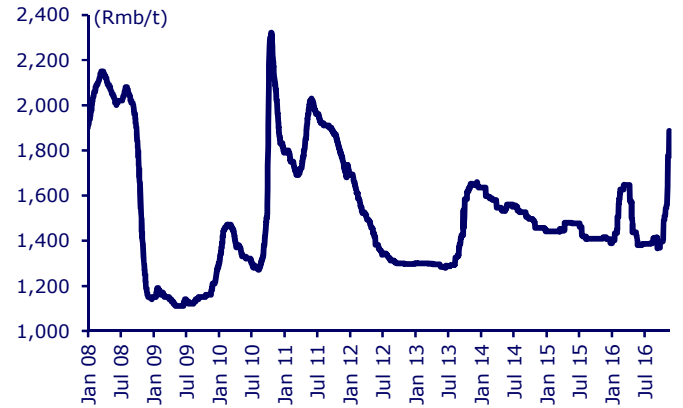
Float glass capacity under operation in China (including lines just ignited and ultra-clear lines)



Source: WIND, CLSA

Figure 6

Domestic soda ash prices



Source: WIND, CLSA

We lift our 16/17/18CL core profit forecasts by 4.2%/1.2%/0.8% mainly on higher float glass ASP and thus GPM. We have also adjusted our TP from HK\$8.30 to HK\$8.35, which is based on a blended PE and PB approach

Figure 7

Earnings revisions

	16CL			17CL		
	New	Old	Change	New	Old	Change
Revenue (HK\$ m)	13,348	13,112	1.8%	13,854	13,719	1.0%
- Automobile glass products	3,978	3,978	0.0%	4,060	4,102	-1.0%
- Construction glass	2,691	2,635	2.1%	2,583	2,529	2.1%
- Float glass (inc. electronic glass)	6,643	6,463	2.8%	7,006	6,883	1.8%
- Wind farm	37	37	0.0%	204	204	0.0%
Gross profit margin	36.2%	35.1%	1.1 ppt	37.8%	37.2%	0.6 ppt
- Automobile glass products	49.1%	49.2%	0.0 ppt	52.0%	52.5%	-0.5 ppt
- Construction glass	40.2%	39.0%	1.2 ppt	39.9%	38.7%	1.2 ppt
- Float glass (inc. electronic glass)	26.7%	24.7%	2.0 ppt	27.9%	26.7%	1.3 ppt
- Wind farm	70.3%	70.3%	0.0 ppt	70.3%	70.3%	0.0 ppt
Core profit (HK\$ m)	3,117	2,992	4.2%	3,627	3,583	1.2%

Source: CLSA

Figure 8

Valuation of Xinyi Glass

PE basis	
Average 17-18CL EPS (HK\$)	0.96
Target multiple (x)	10.0
Fair value (HK\$)	9.60
PB basis	
Average 16-17CL BVPS (HK\$)	3.73
Target multiple (x)	1.9
Fair value (HK\$)	7.10
Average (HK\$)	8.35
Implying 16/17CL PE	10.6x/9.1x

Source: CLSA

Our TP is based on a blended PE and PB approach

Current market-cap implies 7.3x/6.2x its non-solar businesses earnings in 16/17CL

Figure 9

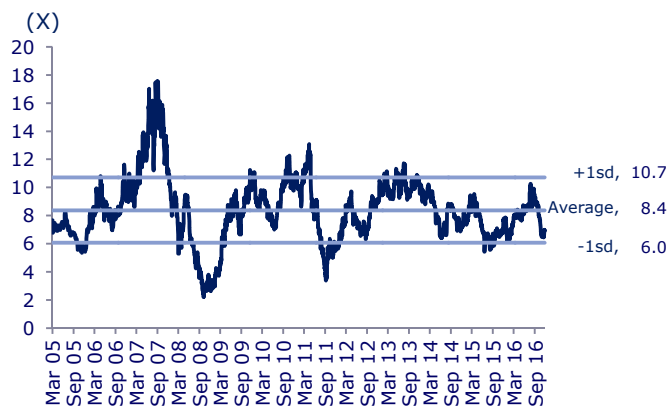
Valuation of Xinyi Glass's non-solar business

HK\$m	FY16CL	FY17CL	
Net profit of Xinyi Glass	3,117	3,627	
Less: after-tax share of profits of Xinyi Solar	(532)	(575)	
Non-solar profit	(a) 2,585	3,052	
Current market cap of Xinyi Glass	(b) 24,049	24,049	
Current market cap of Xinyi Solar	(c) 17,547	17,547	
M'cap of Xinyi Glass's non-solar business	(d) = (b) - 29.5%*(c)	18,978	18,978
PE of Xinyi Glass's non-solar business	(e) = (d)/(a)	7.3	6.2

Source: CLSA

Figure 10

Xinyi Glass 12m fwd PE chart



Source: CLSA, Datastream

Figure 11

Xinyi Glass 12m fwd PB chart



Figure 12

12m fwd PE chart – Xinyi Glass after stripping out Xinyi Solar at market price (since Dec-13)



Source: CLSA, Datastream

Figure 13

XYG - Financials

Year to 31 December	14A	15A	16CL	17CL	18CL
Revenue (HK\$m)	10,861	11,460	13,348	13,854	14,352
<i>Rev forecast change (%)</i>	-	-	1.8	1.0	0.9
Adjusted net profit (HK\$m)	1,144	1,734	3,117	3,627	4,003
<i>NP forecast change (%)</i>	-	-	4.2	1.2	0.8
Adjusted EPS (HK¢)	28.4	43.0	77.6	90.7	100.1
CL/consensus (8) (EPS%)	-	-	100	100	102
Adj EPS growth (% YoY)	(45.3)	51.7	80.5	16.8	10.4
Adjusted PE (x)	21.8	14.4	8.0	6.8	6.2
Dividend yield (%)	2.4	4.3	6.4	7.4	8.2
ROE (%)	11.1	16.9	23.3	24.2	23.7
Net debt/equity (%)	42.0	37.2	39.4	33.5	20.8

Source: CLSA, company

Profit alert implied c.3-11% miss to CL

XYX – c.7.0% miss to CL

XYX estimates its 2016 profit to grow 50-65% YoY from the reported HK\$1,206m in 2015. This translates into HK\$1,808m-1,989m profit in 2016. Assuming no non-core, this suggests a c.2.6-11.5% miss (or c.7.0% on average) to our original core profit forecast of HK\$2,042m, or c.1.6-10.6% miss to Bloomberg consensus (c.6.1% on average).

Excluding the HK\$62.5m non-core gains in 2015 (disposal of JV stake), core profit was HK\$1,144m in 2015. The above profit range implies c.58-74% YoY growth in 2016 core profit.

Key reasons for potential miss include: 1) margin expansion mainly from solar glass ASP rebound in 1H16 since late 2015, plus full-period contribution of natural gas price cut in Nov-15, but offset by weaker ASP in 2H16; 2) c.10% YoY growth in solar glass/back glass sales volume, but lower than our estimated c.27% mainly on weak 2H; offset by 3) higher power generation income (more than 2x) as more solar farm projects became operational.

Figure 14

XYX – 2016 profit alert

HK\$m	2015		2016			2015		2016	
	Reported profit	Estimated YoY growth	Estimated reported profit	CL original core profit forecast	% beat/miss to CL	CL core profit	Implied core profit YoY growth	Bloomberg consensus	% beat/miss to Bloomberg
Lower end	1,206	50%	1,808	2,042	(11.5%)	1,144	58.1%	2,022	(10.6%)
Upper end	1,206	65%	1,989	2,042	(2.6%)	1,144	73.9%	2,022	(1.6%)
Mid-range	1,206	58%	1,899	2,042	(7.0%)	1,144	66.0%	2,022	(6.1%)

Source: Company, CLSA

Also concerns on demand/supply, cost and FiT cut

Likely limited downside on solar glass prices

Weak sentiment recently, more a long-term story

We also noted weak sentiment on the solar space in recent months with c.26% share price correction from peak, mainly due to: 1) weakening demand after rush construction orders ended in 1H16 to result in declining product prices; 2) concerns over new capacity increase; 3) natural gas and soda ash cost hikes, like XYG; and 4) potential cut in FiT by 23-31% as proposed by NEA in Oct.

The slow solar installations in China in 2H16, which triggered lower solar glass ASP and volume, were well anticipated, despite the volume decline and estimated results for XYX were still lower than expectation. In terms of new capacity, we noted XYX and Hebei Jinxin commenced their production lines (1,900t/d in China/Malaysia and 700t/d respectively), but Zhejiang Daming's new line (500t/d) did not come eventually. We believe leading players would continue to hold prices at relatively low level in order to squeeze small players, but prices are also close to the breakeven level of producers thus further downside is also quite limited. We believe lower costs of the Malaysia plant and better efficiency of the larger lines would help XYX partly offset the impact of ASP decline, and any improvement in demand from potential rush orders amid realization of new FiT cut in 1H17 would help.

Likely some delay in new solar farm connections

Meanwhile, for the solar farm business, we expect XYs would not be able to get all 700MW targeted new additions connected to grid, given some project approvals came in late. We estimate c.530MW new connections by end-16, with the c.170MW shortfall to be completed by around 1Q17.

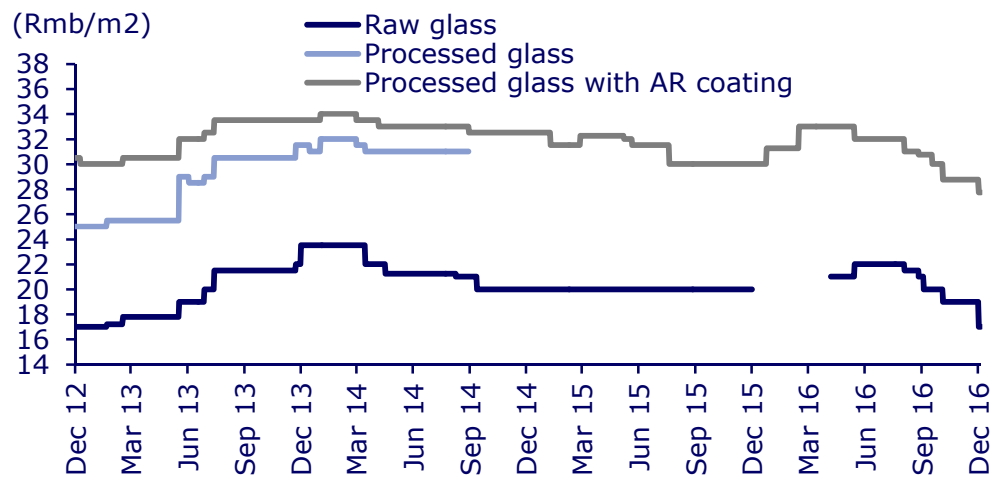
On the other hand, for XYs, direct sales to the US contribute c.6% of total solar glass sales. A 1% decline in US sales could reduce 17CL profit by c.0.1%. Meanwhile, sentiment of the sector could also be affected by Trump's opposition to renewable energy. US accounts for c.13-15% of global solar market.

Overall, we cut our 16/17/18CL core profit forecasts by c.7.3%/8.1%/5.1% to mainly factor in lower solar glass sales volume and solar farm capacity. However, trading at 8.1x 17CL PE and c.5.1% dividend yield, we also believe most risks should have been priced in.

Solar glass price came off after the peak in 1H16

Figure 15

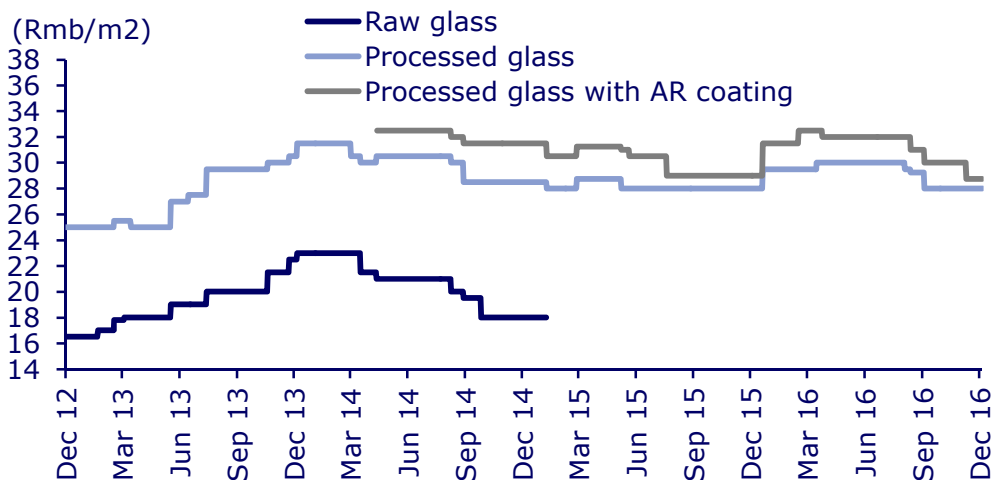
Selling prices of XYs's solar glass – Wuhu plant



Source: SCI99.com, CLSA

Figure 16

Selling prices of XYs's solar glass – Tianjin plant



Source: SCI99.com, CLSA

Figure 17

Ultra-clear PV raw glass producers globally						
(t/d)	2014	15F	16F	17F	18F	Capacity commenced in 2011 or before
Xinyi Solar	3,800	3,900	5,800	5,800	6,800	1,000
Flat Glass Group	2,300	2,300	2,300	2,800	4,100	500
Irico	750	1,500	1,500	2,300	2,300	250
CSG	1,300	1,300	1,300	1,300	1,300	
CNBM Group	160	970	970	1,970	1,970	
Ancai	750	750	750	750	750	750
AVIC Sanxin	650	650	950	950	950	650
Tuori New Energy	550	550	550	550	550	250
Jinxin Solar	250	250	750	1,450	1,450	
Rishengda Solar	500	500	500	500	500	
Henan Yuhua	250	250	250	250	250	250
Henan Sikeda	150	150	150	150	150	
Sulate Solar	250	250	250	250	250	250
Pilkington	120	250	250	250	250	250
Nantong Taide	150	150	150	150	150	
Taiwan Glass	600	600	490	490	490	
Jiangsu Gangyue	250	250	250	250	850	
Yuandong Photoelectric		-	500	500	500	
Fuzhou Xinfuxing			550	550	550	
Qinghai Guangke	250	250	250	250	250	
Jiangsu Xinda	520	650	650	650	650	
Nantong Deli		-	300	300	300	
Anyuan Solar			250	250	250	
Kibing Group					1,000	
Other overseas	1,000	1,000	1,000	1,000	1,000	
Total capacity (t/d)	14,550	16,470	20,660	23,660	27,560	4,150
YoY growth	20.9%	13.2%	25.4%	14.5%	16.5%	
Thickness (mm)	3.2	3.2	3.2	3.2	3.2	
Density (kg/m ³)	2,500	2,500	2,500	2,500	2,500	
Total capacity (m m²)	664	751	943	1,079	1,257	
Effective capacity (m m²)	318	395	449	536	620	
YoY growth	29.8%	24.2%	13.9%	19.4%	15.6%	
<i>Assuming:</i>						
Raw glass yield rate	66%	68%	68%	68%	68%	
Effective utilisation	82%	82%	78%	78%	78%	
<i>Assuming new capacity launches mid-year</i>						

Source: sci99.com, CLSA

Figure 18

XYS: Key solar farm assumptions – under Xinyi Energy								
	2014	2015	2016CL	2017CL	2018CL	2019CL	2020CL	2021CL
Total capacity (MW)	250	620	1,634	2,634	2,934	2,934	2,934	2,934
- 250MW in Anhui	250	250	250	250	250	250	250	250
- 30MW in Fujian		30	30	30	30	30	30	30
- 100MW in Hongan, Hubei		100	100	100	100	100	100	100
- 40MW Lixin County, Anhui		40	40	40	40	40	40	40
- 174MW in Tianjin			174	174	174	174	174	174
- 100MW in Lixin County, Anhui			100	100	100	100	100	100
- 100MW in Wuwei County, Anhui		100	100	100	100	100	100	100
- 40MW in Fanchang County, Anhui			60	60	60	60	60	60
- 100MW in Shou County, Anhui		100	100	100	100	100	100	100
- 20MW in Huainan, Anhui			20	20	20	20	20	20
- 300MW in Anhui in 16CL			300	300	300	300	300	300
- 90MW in Hubei in 16CL			90	90	90	90	90	90
- 100MW in Henan in 16CL			100	100	100	100	100	100
- Addition in 2016CL				170	170	170	170	170
- Addition in 2017CL				1,000	1,000	1,000	1,000	1,000
- Addition in 2018CL					1,000	1,000	1,000	1,000
Effective capacity (MW)	25	309	950	1,925	2,884	3,634	3,634	3,634
- 250MW in Anhui	25	250	250	250	250	250	250	250
- 30MW in Fujian		23	30	30	30	30	30	30
- 100MW in Hongan, Hubei		17	100	100	100	100	100	100

	2014	2015	2016CL	2017CL	2018CL	2019CL	2020CL	2021CL
- 40MW Lixin County, Anhui		12	40	40	40	40	40	40
- 174MW in Tianjin			130.5	174	174	174	174	174
- 100MW in Lixin County, Anhui		-	91.67	100	100	100	100	100
- 100MW in Wuwei County, Anhui		4	100	100	100	100	100	100
- 40MW in Fanchang County, Anhui			52	60	60	60	60	60
- 100MW in Shou County, Anhui		4	100	100	100	100	100	100
- 20MW in Huainan, Anhui			15.00	20	20	20	20	20
- 300MW in Anhui in 16CL			25	300	300	300	300	300
- 90MW in Hubei in 16CL			7.50	90	90	90	90	90
- 100MW in Henan in 16CL			8.33	100	100	100	100	100
- Addition in 2016CL				127.50	170	170	170	170
- Addition in 2017CL				333.33	1,000	1,000	1,000	1,000
- Addition in 2018CL					250	1,000	1,000	1,000
Total power generated (m kWh)¹	29	307	1,038	2,102	3,126	3,899	3,835	3,797
- 250MW in Anhui	29	248	270	267	264	262	259	256
- 30MW in Fujian		23	33	32	32	32	31	31
- 100MW in Hongan, Hubei		17	109	108	107	106	105	104
- 40MW Lixin County, Anhui		12	44	43	43	42	42	41
- 174MW in Tianjin			149	196	194	192	190	188
- 100MW in Lixin County, Anhui			100	108	107	106	105	104
- 100MW in Wuwei County, Anhui		4	109	108	107	106	105	104
- 40MW in Fanchang County, Anhui			56	65	64	63	63	62
- 100MW in Shou County, Anhui		4	109	108	107	106	105	104
- 20MW in Huainan, Anhui			17	22	22	21	21	21
- 300MW in Anhui in 16CL			28	330	323	320	317	314
- 90MW in Hubei in 16CL			8	99	97	96	95	94
- 100MW in Henan in 16CL			9	110	108	107	106	105
- Addition in 2016CL			-	140	184	181	180	178
- Addition in 2017CL				367	1,093	1,067	1,057	1,046
- Addition in 2018CL					275	1,092	1,057	1,046
FIT (Rmb/kWh) (excl. VAT)	0.85	0.83	0.82	0.76	0.70	0.67	0.67	0.67
- 250MW in Anhui	1.00	1.00	0.98	0.98	0.98	0.98	0.98	0.98
- 30MW in Fujian		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 100MW in Hongan, Hubei		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 40MW Lixin County, Anhui		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 174MW in Tianjin		0.95	0.95	0.95	0.95	0.95	0.95	0.95
- 100MW in Lixin County, Anhui		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 100MW in Wuwei County, Anhui		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 40MW in Fanchang County, Anhui		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 100MW in Shou County, Anhui		1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 20MW in Huainan, Anhui			1.00	1.00	1.00	1.00	1.00	1.00
- 300MW in Anhui in 16CL			0.98	0.98	0.98	0.98	0.98	0.98
- 90MW in Hubei in 16CL			1.00	1.00	1.00	1.00	1.00	1.00
- 100MW in Henan in 16CL			0.98	0.98	0.98	0.98	0.98	0.98
- Addition in 2016CL			0.75	0.75	0.75	0.75	0.75	0.75
- Addition in 2017CL				0.70	0.70	0.70	0.70	0.70
- Addition in 2018CL					0.65	0.65	0.65	0.65
Utilisation hours	862	1,000	1,107	1,105	1,103	1,102	1,102	1,102
- 250MW in Anhui	862	1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 30MW in Fujian		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 100MW in Hongan, Hubei		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 40MW Lixin County, Anhui		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 174MW in Tianjin		1,000	1,150	1,150	1,150	1,150	1,150	1,150
- 100MW in Lixin County, Anhui		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 100MW in Wuwei County, Anhui		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 40MW in Fanchang County, Anhui		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 100MW in Shou County, Anhui		1,000	1,100	1,100	1,100	1,100	1,100	1,100
- 20MW in Huainan, Anhui			1,100	1,100	1,100	1,100	1,100	1,100
- 300MW in Anhui in 16CL			1,100	1,100	1,100	1,100	1,100	1,100
- 90MW in Hubei in 16CL			1,100	1,100	1,100	1,100	1,100	1,100
- 100MW in Henan in 16CL			1,100	1,100	1,100	1,100	1,100	1,100
- Addition in 2016CL			1,100	1,100	1,100	1,100	1,100	1,100
- Addition in 2017CL				1,100	1,100	1,100	1,100	1,100
- Addition in 2018CL					1,100	1,100	1,100	1,100

	2014	2015	2016CL	2017CL	2018CL	2019CL	2020CL	2021CL
Revenue (Rmb m)	24	250	851	1,604	2,185	2,596	2,557	2,531
- 250MW in Anhui	24	201	219	217	215	213	211	208
- 30MW in Fujian		19	27	27	27	26	26	26
- 100MW in Hongan, Hubei		14	90	89	89	88	87	86
- 40MW Lixin County, Anhui		10	36	36	35	35	35	34
- 174MW in Tianjin			117	155	153	152	150	149
- 100MW in Lixin County, Anhui			83	89	89	88	87	86
- 100MW in Wuwei County, Anhui		3	90	89	89	88	87	86
- 40MW in Fanchang County, Anhui			47	54	53	53	52	52
- 100MW in Shou County, Anhui		3	90	89	89	88	87	86
- 20MW in Huainan, Anhui			14	18	18	18	18	17
- 300MW in Anhui in 16CL			22	268	263	260	258	255
- 90MW in Hubei in 16CL			7	82	81	80	79	78
- 100MW in Henan in 16CL			7	89	88	87	86	85
- Addition in 2016CL			-	87	115	113	112	111
- Addition in 2017CL			-	213	635	620	614	608
- Addition in 2018CL			-	-	148	589	570	564
Unit capex (Rmb/W)								
- 250MW in Anhui	6.8	6.8	5.2	5.2	5.2	5.2	5.2	5.2
- 30MW in Fujian	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
- 100MW in Hongan, Hubei		6.8	6.8	6.8	6.8	6.8	6.8	6.8
- 40MW Lixin County, Anhui		6.8	6.8	6.8	6.8	6.8	6.8	6.8
- 174MW in Tianjin		6.2	6.2	6.2	6.2	6.2	6.2	6.2
- 100MW in Lixin County, Anhui		6.2	6.2	6.2	6.2	6.2	6.2	6.2
- 100MW in Wuwei County, Anhui		6.2	6.2	6.2	6.2	6.2	6.2	6.2
- 40MW in Fanchang County, Anhui		6.2	6.2	6.2	6.2	6.2	6.2	6.2
- 100MW in Shou County, Anhui		6.2	6.2	6.2	6.2	6.2	6.2	6.2
- 20MW in Huainan, Anhui			6.0	6.0	6.0	6.0	6.0	6.0
- 300MW in Anhui in 16CL			5.8	5.8	5.8	5.8	5.8	5.8
- 90MW in Hubei in 16CL			5.5	5.5	5.5	5.5	5.5	5.5
- 100MW in Henan in 16CL			5.5	5.5	5.5	5.5	5.5	5.5
- Addition in 2016CL			5.5	5.3	5.3	5.3	5.3	5.3
- Addition in 2017CL				5.2	5.2	5.2	5.2	5.2
- Addition in 2018CL					5.0	5.0	5.0	5.0

¹ With 1% degradation every year. Source: CLSA, Company

Figure 19

XYs: Key solar farm assumptions – JVs

	2015CL	2016CL	2017CL	2018CL	2019CL	2020CL	2021CL
Total capacity (MW)	100	100	100	100	100	100	100
- Anhui Jinzhai Solar Plant Phase II	100	100	100	100	100	100	100
Effective capacity (MW)		92	92	92	92	92	92
- Anhui Jinzhai Solar Plant Phase II		92	92	92	92	92	92
Total power generated (m kWh)*		101	100	99	98	97	96
- Anhui Jinzhai Solar Plant Phase II		101	100	99	98	97	96
FiT (Rmb/kWh) (excl. VAT)		0.81	0.81	0.81	0.81	0.81	0.81
- Anhui Jinzhai Solar Plant Phase II		0.98	0.98	0.98	0.98	0.98	0.98
Utilisation hours		1,100	1,100	1,100	1,100	1,100	1,100
- Anhui Jinzhai Solar Plant Phase II		1,100	1,100	1,100	1,100	1,100	1,100
Revenue (Rmb m)		82	81	80	80	79	78
- Anhui Jinzhai Solar Plant Phase II		82	81	80	80	79	78
Unit capex (Rmb/W)							
- Anhui Jinzhai Solar Plant Phase II	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Effective equity interest	50%	50%	50%	50%	50%	50%	50%
- Anhui Jinzhai Solar Plant Phase II	50%	50%	50%	50%	50%	50%	50%

* With 1% degradation every year. Source: CLSA

Figure 20

Earnings revisions - XYS

	New		Old		Change	
	16CL	17CL	16CL	17CL	16CL	17CL
Revenue						
Ultra-clear photovoltaic raw glass	206	173	212	188	-2.8%	-8.1%
Ultra-clear photovoltaic processed glass	4,131	4,789	4,739	5,384	-12.8%	-11.0%
Sale of electricity	978	1,765	978	1,851	0.0%	-4.7%
Solar EPC	500	326	500	326	0.0%	0.0%
Total	5,815	7,053	6,429	7,749	-9.5%	-9.0%
Gross margin						
Ultra-clear photovoltaic raw glass	29.2%	19.9%	31.6%	26.2%	-2.4 ppt	-6.3 ppt
Ultra-clear photovoltaic processed glass	44.9%	40.3%	43.9%	40.4%	1.0 ppt	-0.1 ppt
Sale of electricity	76.4%	76.6%	76.4%	76.0%	0.0 ppt	0.6 ppt
Solar EPC	20.0%	19.0%	20.0%	19.0%	0.0 ppt	0.0 ppt
Total	47.5%	47.9%	46.6%	47.7%	0.9 ppt	0.2 ppt
Core profit	1,893	2,162	2,042	2,351	-7.3%	-8.1%

Source: CLSA

We continue to use an SOTP valuation for XYS

We value XYS using SOTP, with the solar glass/EPC businesses using a PE approach and solar farms/DG projects using DCF.

- 1) Solar glass: We use a PE approach with an unchanged target multiple of 10x 17CL;
- 2) Solar farms: DCF model with a WACC of 8.2% (from 8.0%), derived from a risk-free rate of 3.0% (from 4.0%); market risk premium of 8.0% (from 7.0%); beta of 1.4; after-tax interest rate of 2.3%; leverage of 50%; and terminal growth rate of 1.5%;
- 3) DG project: DCF model on the two rooftop projects (25MW in Tianjin and 13.1MW in Wuhu) with the same WACC of 8.2%;
- 4) EPC: We use a PE approach with same target multiple of 6x 17CL.

Overall, our valuation for the company is HK\$23.8bn, implying a target price of HK\$3.50 (was HK\$3.90), translating into 11.0x 17CL PE.

We expect weak sentiment to be a drag on share price performance in the short term but the current weakness offers an opportunity to accumulate a long-term winner. Maintain BUY.

Any policy-driven improvement in sector dynamics (eg, curtailment, subsidy payment, demand quota), and improvement in solar glass price outlook (eg capacity closure/expansion plan withdrawal by peers after a price decline, natural gas price cut) would be catalysts for the stock.

Figure 21

SOTP valuation summary - XYS

Valuation of solar glass business	HK\$ m	14,420
Valuation of solar farms	HK\$ m	8,826
Valuation of distributed project	HK\$ m	335
Valuation of EPC	HK\$ m	170
Total valuation	HK\$ m	23,751
Total no. of shares	m	6,749
Value per share	HK\$	3.50
Net profit for Xinyi Solar in 17CL	HK\$ m	2,162
Implied 17CL PE	x	11.0

Source: CLSA

Overall valuation of HK\$23.8bn

Figure 25

12m forward PE of XYS



Source: Datastream, CLSA

Figure 26

12m forward PB of XYS



Source: Datastream, CLSA

Figure 27

XYS - Financials

Year to 31 December	14A	15A	16CL	17CL	18CL
Revenue (HK\$m)	2,410	4,750	5,815	7,053	8,701
Rev forecast change (%)	-	-	(9.5)	(9.0)	(4.6)
Adjusted net profit (HK\$m)	506	1,144	1,893	2,162	2,664
NP forecast change (%)	-	-	(7.3)	(8.1)	(5.1)
Adjusted EPS (HK\$)	0.09	0.18	0.28	0.32	0.39
CL/consensus (23) (EPS%)	-	-	97	85	94
Adj EPS growth (% YoY)	17.9	103.4	59.5	14.2	23.2
Adjusted PE (x)	30.1	14.8	9.3	8.1	6.6
Dividend yield (%)	1.5	3.3	5.1	5.8	7.1
ROE (%)	18.0	25.3	29.6	28.1	29.1
Net debt/equity (%)	22.9	10.5	49.6	41.5	54.0

Source: CLSA, company

Valuation details - Xinyi Glass Holdings Ltd 868 HK

We value XYG using a blended PE and PB approach. We apply a target multiple of 10x to average 17-18CL EPS and a target multiple of 1.9x to average 16-17CL BVPS, in line with the historical averages.

Investment risks - Xinyi Glass Holdings Ltd 868 HK

Key risks include: 1) Weakening of the property market or even the auto market. Demand for float glass and construction glass is highly dependent on the property market. Besides, despite being a stable business, the auto glass segment is correlated to the global number of vehicles in use, and any significant slowdown in the global auto industry may also affect the segment's performance. 2) Further tightening of credit. Tightening of credit also affects developers' cash flows and progress in construction of property projects. 3) Incremental production costs. A significant surge in natural gas, international crude oil prices and other raw material costs may affect XYG's gross margin if

it cannot pass on incremental costs by raising ASP. 4) More capacity additions in the market.

Valuation details - Xinyi Solar Holdings Ltd 968 HK

We value XYS on an SOTP basis, using a PE approach for the solar glass/EPC businesses and DCF valuation for solar farm/DG projects.

Investment risks - Xinyi Solar Holdings Ltd 968 HK

Key risks include: 1) A change in the governments' supportive stance on the solar sector, as the solar industry is still in a relatively early stage of development and is getting a boost from incentive programmes implemented by the governments of various countries. 2) Risk of oversupply. The expansion in production capacity of various solar-glass producers may not be commensurate to increase in demand for solar-glass products, which could result in pressure on their prices. 3) Technological advancement. The solar industry is developing rapidly and the associated technologies are also advancing quickly. It is important for XYS to develop and improve its technologies quickly to respond to changes in the market, by means of improving its existing products and developing new ones. 4) Payment of government subsidy on solar projects as well as risk of curtailment, which would affect downstream-project returns.

Summary financials - XYG

Year to 31 December	2014A	2015A	2016CL	2017CL	2018CL
Summary P&L forecast (HK\$m)					
Revenue	10,861	11,460	13,348	13,854	14,352
Op Ebitda	1,740	2,313	3,846	4,403	4,778
Op Ebit	1,095	1,518	2,958	3,393	3,662
Interest income	53	40	53	49	42
Interest expense	(91)	(90)	(118)	(91)	(89)
Other items	536	912	757	851	1,006
Profit before tax	1,593	2,380	3,650	4,202	4,621
Taxation	(228)	(266)	(532)	(575)	(618)
Minorities/Pref divs	(1)	0	0	0	0
Net profit	1,364	2,113	3,117	3,627	4,003
Summary cashflow forecast (HK\$m)					
Operating profit	1,095	1,518	2,958	3,393	3,662
Operating adjustments	-	-	-	-	-
Depreciation/amortisation	644	795	887	1,010	1,116
Working capital changes	(559)	(207)	(268)	(46)	(59)
Net interest/taxes/other	(314)	(421)	(651)	(666)	(707)
Net operating cashflow	867	1,685	2,927	3,691	4,012
Capital expenditure	(1,729)	(1,967)	(2,120)	(2,600)	(1,500)
Free cashflow	(862)	(282)	807	1,091	2,512
Acq/inv/disposals	93	-	(618)	-	-
Int, invt & associate div	588	951	810	900	1,048
Net investing cashflow	(1,049)	(1,016)	(1,928)	(1,700)	(452)
Increase in loans	873	16	1,013	(613)	(1,551)
Dividends	(902)	(1,029)	(1,533)	(1,784)	(1,968)
Net equity raised/other	0	812	(265)	-	0
Net financing cashflow	(30)	(202)	(785)	(2,396)	(3,520)
Incr/(decr) in net cash	(211)	468	214	(405)	40
Exch rate movements	-	-	-	-	-
Opening cash	1,043	832	1,300	1,514	1,108
Closing cash	832	1,300	1,514	1,108	1,148
Summary balance sheet forecast (HK\$m)					
Cash & equivalents	832	1,300	1,514	1,108	1,148
Debtors	1,028	1,136	1,260	1,308	1,355
Inventories	1,478	1,223	1,367	1,363	1,390
Other current assets	1,467	1,337	1,337	1,337	1,337
Fixed assets	11,293	11,971	13,234	14,855	15,268
Intangible assets	1,366	1,281	1,250	1,220	1,191
Other term assets	3,570	3,174	3,792	3,792	3,792
Total assets	21,034	21,422	23,755	24,983	25,480
Short-term debt	2,529	2,514	2,936	2,681	2,034
Creditors	724	740	741	738	753
Other current liabs	1,548	1,705	1,705	1,705	1,705
Long-term debt/CBs	3,483	3,514	4,105	3,747	2,843
Provisions/other LT liabs	414	223	223	223	223
Minorities/other equity	2	7	7	7	7
Shareholder funds	12,333	12,718	14,038	15,881	17,915
Total liabs & equity	21,034	21,422	23,755	24,983	25,480
Ratio analysis					
Revenue growth (% YoY)	9.3	5.5	16.5	3.8	3.6
Ebitda growth (% YoY)	(37.7)	33.0	66.2	14.5	8.5
Ebitda margin (%)	16.0	20.2	28.8	31.8	33.3
Net profit margin (%)	12.6	18.4	23.4	26.2	27.9
Dividend payout (%)	44.4	50.5	50.7	50.6	50.6
Effective tax rate (%)	14.3	11.2	14.6	13.7	13.4
Ebitda/net int exp (x)	45.7	46.1	58.8	104.5	102.7
Net debt/equity (%)	42.0	37.2	39.4	33.5	20.8
ROE (%)	11.1	16.9	23.3	24.2	23.7
ROIC (%)	6.2	8.7	15.9	16.8	17.1
EVA@/IC (%)	(5.4)	(2.9)	4.3	5.2	5.5

Source: CLSA, company

Summary financials - XYS

Year to 31 December	2014A	2015A	2016CL	2017CL	2018CL
Summary P&L forecast (HK\$m)					
Revenue	2,410	4,750	5,815	7,053	8,701
Op Ebitda	597	1,432	2,681	3,443	4,462
Op Ebit	502	1,206	2,245	2,787	3,557
Interest income	2	5	9	8	8
Interest expense	(7)	(21)	(101)	(113)	(143)
Other items	87	143	167	160	160
Profit before tax	585	1,332	2,319	2,842	3,582
Taxation	(79)	(188)	(284)	(292)	(376)
Minorities/Pref divs	0	0	(142)	(388)	(542)
Net profit	506	1,144	1,893	2,162	2,664
Summary cashflow forecast (HK\$m)					
Operating profit	502	1,206	2,245	2,787	3,557
Operating adjustments	-	-	-	-	-
Depreciation/amortisation	94	226	437	656	905
Working capital changes	116	(580)	(498)	(151)	(201)
Net interest/taxes/other	0	(5)	(219)	(244)	(359)
Net operating cashflow	713	846	1,964	3,048	3,902
Capital expenditure	(2,381)	(3,583)	(4,812)	(6,139)	(5,688)
Free cashflow	(1,668)	(2,736)	(2,848)	(3,091)	(1,786)
Acq/inv/disposals	0	1,580	-	2,800	-
Int, invt & associate div	2	5	9	8	8
Net investing cashflow	(2,379)	(1,998)	(4,803)	(3,331)	(5,680)
Increase in loans	1,300	2,290	4,062	(224)	4,158
Dividends	(200)	(249)	(580)	(889)	(1,015)
Net equity raised/other	829	1,437	0	-	-
Net financing cashflow	1,929	3,478	3,482	(1,113)	3,143
Incr/(decr) in net cash	264	2,326	643	(1,396)	1,364
Exch rate movements	-	-	-	-	-
Opening cash	279	543	2,869	3,512	2,116
Closing cash	543	2,869	3,512	2,116	3,480
Summary balance sheet forecast (HK\$m)					
Cash & equivalents	543	2,869	3,512	2,116	3,480
Debtors	351	806	1,275	1,546	1,907
Inventories	299	199	407	493	609
Other current assets	0	0	0	0	0
Fixed assets	3,685	7,104	11,483	16,970	21,757
Intangible assets	180	180	176	172	168
Other term assets	706	1,577	1,577	1,577	1,577
Total assets	5,764	12,735	18,430	22,874	29,498
Short-term debt	143	474	1,011	981	1,530
Creditors	516	794	973	1,180	1,455
Other current liabs	633	1,441	1,441	1,441	1,441
Long-term debt/CBs	1,157	3,116	6,642	6,447	10,056
Provisions/other LT liabs	10	17	17	17	17
Minorities/other equity	0	1,146	1,288	4,477	5,019
Shareholder funds	3,306	5,745	7,057	8,331	9,980
Total liabs & equity	5,764	12,735	18,430	22,874	29,498
Ratio analysis					
Revenue growth (% YoY)	22.5	97.1	22.4	21.3	23.4
Ebitda growth (% YoY)	47.2	139.9	87.3	28.4	29.6
Ebitda margin (%)	24.8	30.1	46.1	48.8	51.3
Net profit margin (%)	21.0	24.1	32.5	30.7	30.6
Dividend payout (%)	46.3	49.5	47.0	47.0	47.0
Effective tax rate (%)	13.5	14.1	12.3	10.3	10.5
Ebitda/net int exp (x)	117.5	86.8	29.0	32.6	33.0
Net debt/equity (%)	22.9	10.5	49.6	41.5	54.0
ROE (%)	18.0	25.3	29.6	28.1	29.1
ROIC (%)	14.2	18.0	19.9	16.5	15.6
EVA@/IC (%)	2.9	6.6	8.6	5.1	4.2

Source: CLSA, company

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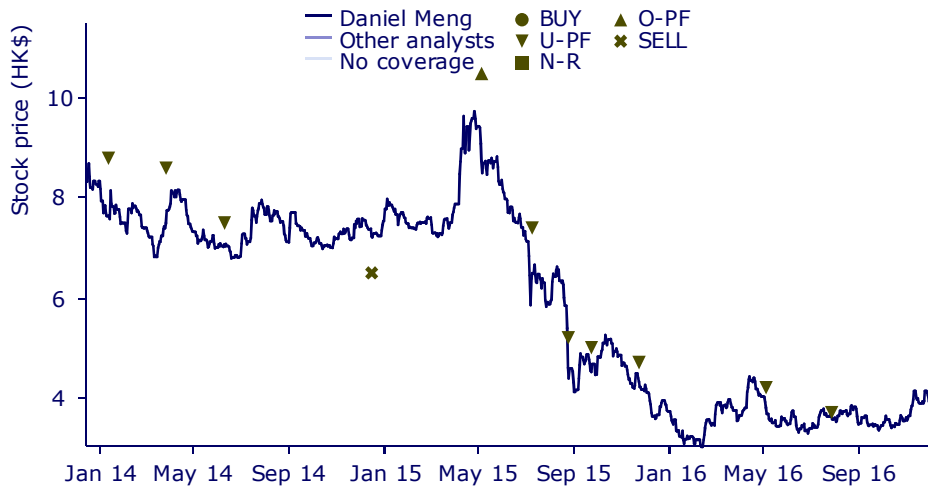
Ancai (N-R)
Anyuan Solar (N-R)
Avic Sanxin (N-R)
CNBM (3323 HK - HK\$4.00 - UNDERPERFORM)
CSG (N-R)
Flat Glass Group (N-R)
Fuzhou Xinfuxing (N-R)
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Nantong Taide (N-R)
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Rishengda Solar (N-R)
Sulate Solar (N-R)
SYP Glass (N-R)
Taiwan Glass (N-R)
Tuori New Energy (N-R)
Xinyi Glass (868 HK - HK\$6.18 - BUY)
Xinyi Solar (968 HK - HK\$2.60 - BUY)
Yuandong Photoelectric (N-R)
Zhejiang Daming (N-R)

Analyst certification

The analyst(s) of this report hereby certify that the views expressed in this research report accurately reflect my/our own personal views about the securities and/or the issuers and that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this research report.

Important disclosures

Recommendation history of China National Building Material Co Ltd 3323 HK



Date	Rec	Target	Date	Rec	Target
28 Jul 2016	U-PF	3.70	06 May 2015	O-PF	10.50
05 May 2016	U-PF	4.20	16 Dec 2014	SELL	6.50
24 Nov 2015	U-PF	4.70	10 Jun 2014	U-PF	7.50
24 Sep 2015	U-PF	5.00	27 Mar 2014	U-PF	8.60
25 Aug 2015	U-PF	5.20	12 Jan 2014	U-PF	8.80
10 Jul 2015	U-PF	7.40			

Source: CLSA

Recommendation history of Xinyi Glass Holdings Ltd 868 HK

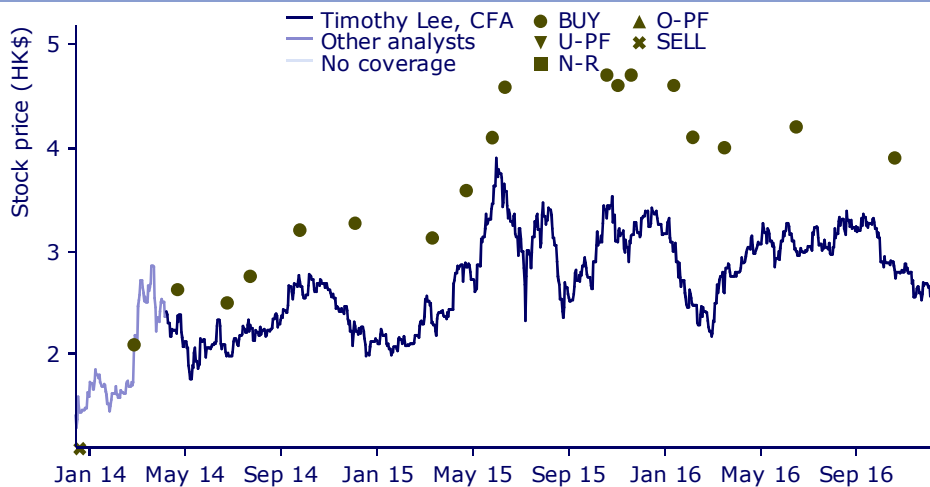


Prepared for -

Date	Rec	Target	Date	Rec	Target
08 Nov 2016	BUY	8.30	24 Apr 2015	O-PF	4.90
08 Sep 2016	BUY	8.35	03 Mar 2015	O-PF	4.81
03 Aug 2016	BUY	7.25	10 Dec 2014	O-PF	4.23
15 Jun 2016	O-PF	6.12	25 Sep 2014	O-PF	5.28
04 May 2016	O-PF	5.56	24 Jul 2014	O-PF	4.85
16 Mar 2016	O-PF	4.80	25 Jun 2014	O-PF	4.95
05 Feb 2016	O-PF	4.24	23 May 2014	BUY	6.31
19 Nov 2015	O-PF	4.33	27 Feb 2014	BUY	8.48
29 Jul 2015	O-PF	4.24			

Source: CLSA

Recommendation history of Xinyi Solar Holdings Ltd 968 HK



Date	Rec	Target	Date	Rec	Target
18 Oct 2016	BUY	3.90	24 Apr 2015	BUY	3.59
15 Jun 2016	BUY	4.20	12 Mar 2015	BUY	3.13
16 Mar 2016	BUY	4.00	04 Dec 2014	BUY	3.27
05 Feb 2016	BUY	4.10	25 Sep 2014	BUY	3.20
12 Jan 2016	BUY	4.60	24 Jul 2014	BUY	2.76
19 Nov 2015	BUY	4.70	25 Jun 2014	BUY	2.50
02 Nov 2015	BUY	4.60	23 Apr 2014	BUY	2.63
19 Oct 2015	BUY	4.70	27 Feb 2014	BUY	2.10
12 Jun 2015	BUY	4.58	20 Dec 2013	SELL	1.10
27 May 2015	BUY	4.10			

Source: CLSA

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