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China

Small caps

XYG/XYS: positive 1H16 alerts

Both to beat our forecasts on pleasing margin expansion

Both Xinyi Glass (XYG) and Xinyi Solar (XYS) issued positive profit alerts for 1H16 implying potential 2-14% and 5-17% beats to our original forecasts, respectively. The key drivers are higher margins with lower cost/better prices plus volume growth. We maintain our High-conviction BUY on XYS (increasing our TP to HK\$4.20 from HK\$4). The recently announced national solar project quota offers better demand visibility in 2H16, and further policy improvement is a potential catalyst. We maintain O-PF on XYG (raising TP to HK\$6.50 from HK\$5.90). YTD strong property sales imply a satisfactory peak season for float glass in 2H16 but long-term visibility on property sector growth remains uncertain.

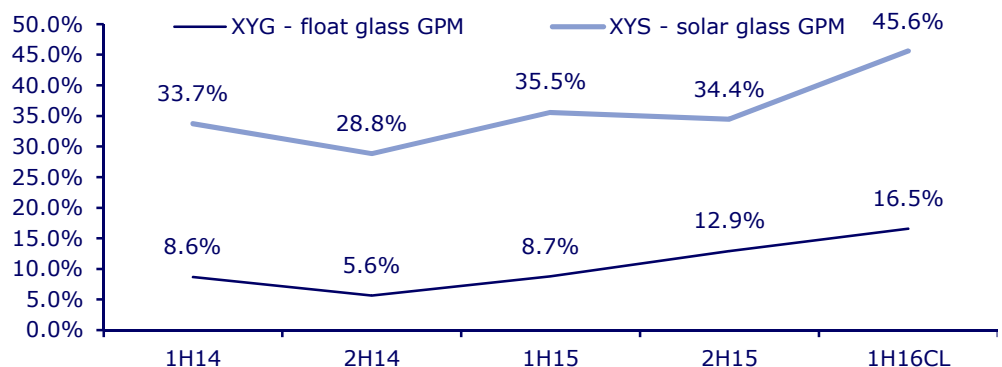
XYS: 1H core profit could rise 89-112%, beating our estimates 5-17%

- XYS estimates its 1H16 net profit to grow 70-90% YoY from the reported HK\$601m in 1H15. This translates into HK\$1,022m-1,142m profit in 1H16, or 4.7-17.0% beat to our core profit forecast of HK\$976m.
- Excluding the HK\$62.5m non-core gains in 1H15 (disposal of JV stake), core profit was HK\$539m in 1H15. The above profit range implies 89-112% YoY growth in 1H16 core profit, with 56-62% of FY16 Bloomberg consensus profit achieved.
- Major reasons for this profit jump include: 1) margin expansion, mainly as solar glass prices have rebounded since late 2015 amid rush construction orders as well as full-period contribution in 1H16 of a cut in the natural gas price in Nov-15; 2) a jump of c.50% YoY in solar glass sales volume; 3) higher income from power generation as more solar farm projects became operational.
- We raise our 2016/17/18 core profit forecasts by 11.1%/6.8%/4.5% to factor in higher solar glass ASP/volume assumptions and slightly lower SG&A. Our SOTP-based TP also increases from HK\$4.00 to HK\$4.20. Maintain High-conviction BUY.

XYG: 1H core profit could rise 59-77%, beating our estimates 2-14%

- XYG estimates its 1H16 net profit to grow 30-45% YoY from the reported HK\$945m in 1H15. This translates into HK\$1,228m-1,370m profit in 1H16, or a 1.9-13.7% beat to our core profit forecast of HK\$1,205m.
- Excluding the HK\$172m non-core gains in 1H15 (FX, subsidiary disposal, deemed gain from XYS's placement), core profit was HK\$772m in 1H15. The above profit range implies 59-77% YoY growth in 1H16 core profit, with 52-58% of FY16 Bloomberg consensus profit achieved.
- Major reasons for the profit jump include: 1) margin expansion, mainly on full-period contribution of a cut in the natural gas price in Nov-15 and a slight rebound in float glass prices; 2) rising float glass sales volume owing to a capacity increase; and 3) significant profit growth of associate XYS, in which XYG has a 29.53% stake.
- We raise our 16/17/18CL core profit by 6.6%/5.1%/4.6% to factor in higher float glass ASP/margin and slightly lower SG&A. We also raise our target from HK\$5.90 to HK\$6.50 based on blended PE/PB. Maintain O-PF.

Margin expansion drove robust profit growth



Source: Companies, CLSA

XYX

Figure 1

XYX – 1H16 profit alert

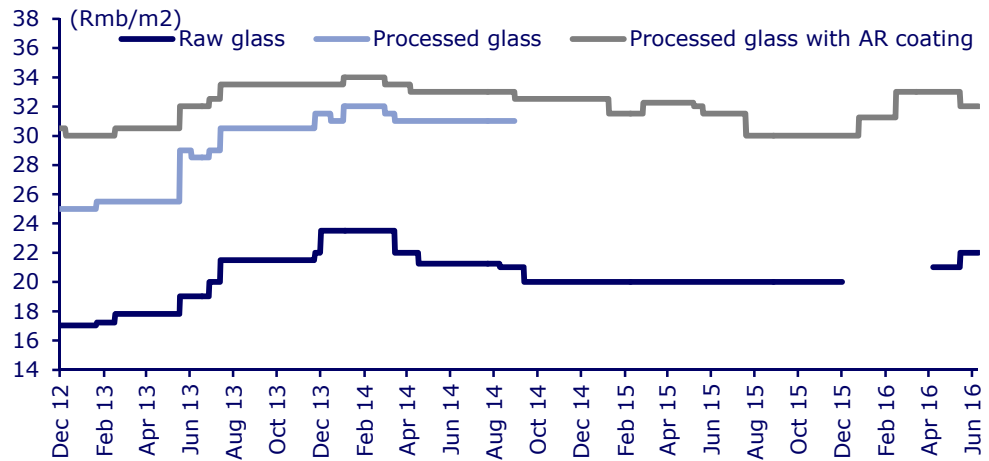
HK\$m	Lower end	Higher end	Mid-point
1H15 reported profit	601	601	
Expected growth	70%	90%	
1H16 profit range	1,022	1,142	1,082
1H15 core profit	539	539	
Implied YoY growth in core profit	89.4%	111.7%	
Old 1H16CL core profit forecast	976	976	976
Profit alert implied % beat to CL	4.7%	17.0%	10.8%
FY16 Bloomberg consensus	1,839	1,839	1,839
% achievement	55.6%	62.1%	58.8%

Source: Company, Bloomberg, CLSA

Solar glass prices have rebounded since late 2H15

Figure 2

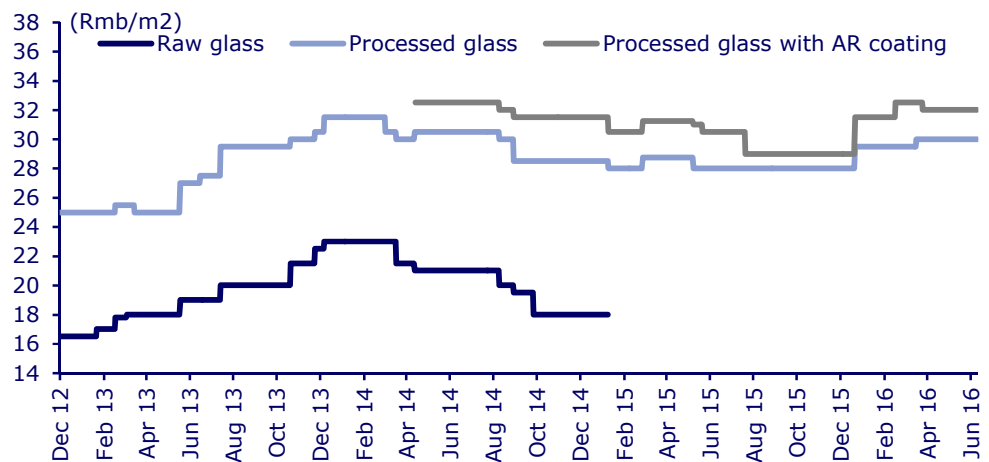
Selling prices of XYX’s solar glass – Wuhu plant



Source: SCI99.com, CLSA

Figure 3

Selling prices of XYX’s solar glass – Tianjin plant



Source: SCI99.com, CLSA

Figure 4

Earnings revisions - XYX

	New		Old		Change	
	16CL	17CL	16CL	17CL	16CL	17CL
Revenue						
Ultra-clear photovoltaic raw glass	220	190	220	190	0.0%	0.0%
Ultra-clear photovoltaic processed glass	4,910	5,313	4,438	4,941	10.6%	7.5%
Sale of electricity	1,128	2,016	1,128	2,016	0.0%	0.0%
Solar EPC	500	312	500	312	0.0%	0.0%
Total	6,758	7,831	6,286	7,459	7.5%	5.0%
Gross margin						
Ultra-clear photovoltaic raw glass	23.9%	19.0%	23.9%	19.0%	0.0 ppt	0.0 ppt
Ultra-clear photovoltaic processed glass	44.8%	43.7%	44.4%	43.3%	0.5 ppt	0.5 ppt
Sale of electricity	76.2%	75.3%	76.2%	75.3%	0.0 ppt	0.0 ppt
Solar EPC	13.0%	12.0%	13.0%	12.0%	0.0 ppt	0.0 ppt
Total	47.0%	50.0%	46.9%	50.0%	0.2 ppt	0.0 ppt
Core profit	2,162	2,554	1,946	2,392	11.1%	6.8%

Source: CLSA

We now forecast XYX's
1H16CL core profit to
surge c.102% YoY

Figure 5

XYX – Condensed half-yearly P&L

HK\$m	1H15	2H15	1H16CL	YoY growth
Sales	2,054	2,697	3,234	57.5%
COGS (excl depreciation)	(1,218)	(1,615)	(1,592)	30.7%
Operating expenses (ex D&A)	(194)	(291)	(257)	32.3%
Core Ebitda	642	790	1,385	115.9%
Depreciation	(93)	(129)	(158)	70.1%
Amortisation	(2)	(2)	(2)	3.2%
Core Ebit	547	659	1,226	124.1%
...Ebit margin	26.6%	24.4%	37.9%	
Other revenue (ex-interest)	78	64	88	12.0%
Interest income	8	(3)	16	103.7%
Interest expense	(5)	(16)	(32)	582.0%
Net interest expense	3	(20)	(16)	-613.7%
Share of associates' profits			0	NA
Share of JCE profit			8	NA
Profit before tax	628	704	1,305	107.6%
Tax expense	(89)	(99)	(173)	94.1%
Minority interest	0	0	(45)	NA
Net profit after tax, pre-exceptionals	539	605	1,087	101.6%
Exceptional gain/(loss)	62	0	0	-100.0%
Net profit after tax	601	605	1,087	80.9%
... NPM, pre-exceptionals	26.3%	22.4%	33.6%	

Source: CLSA, Company

Figure 6

XYX – Financials

Year to 31 December	14A	15A	16CL	17CL	18CL
Revenue (HK\$m)	2,410	4,750	6,758	7,831	9,293
Rev forecast change (%)	-	-	7.5	5.0	3.7
Adjusted net profit (HK\$m)	506	1,144	2,162	2,554	3,037
NP forecast change (%)	-	-	11.1	6.8	4.5
Adjusted EPS (HK\$)	0.09	0.18	0.32	0.38	0.45
CL/consensus (16) (EPS%)	-	-	119	111	117
Adj EPS growth (% YoY)	17.9	103.4	82.2	18.1	18.9
Adjusted PE (x)	35.0	17.2	9.5	8.0	6.7
Dividend yield (%)	1.3	2.9	5.0	5.9	7.0
ROE (%)	18.0	25.3	33.1	31.5	31.0
Net debt/equity (%)	22.9	10.5	30.1	59.2	53.1

Source: Company, Bloomberg, CLSA

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

We continue to use an SOTP valuation for XYX

- 1) Solar glass: We use a PE approach with an unchanged target multiple of 10x 17CL, which is in line with the average of HK-listed solar-related peers;
- 2) Solar farms: DCF model with a WACC of 8.0%, derived from a risk-free rate of 4.0%; market risk premium of 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 8.0%;
- 4) EPC: We use a PE approach with target multiple of 6x 17CL, which is in line with the average of solar integrators and installation contractor peers.

Overall, our valuation for the company is HK\$28.3bn, implying a target price of HK\$4.20 (from HK\$4.00). We rate the stock a High Conviction BUY. XYX remains one of our preferred picks in the HK/China small & mid (SMID) cap space. Recent national solar project quota should provide better demand visibility in 2H16. Any policy-driven improvement in sector dynamics (eg, curtailment, subsidy payment, demand quota), and better than expected solar glass pricing environment (we are expecting price declines in 2H16 amid faster market capacity growth than demand) are catalysts for the stock.

Figure 7

SOTP valuation summary - XYX

Valuation of solar glass business	HK\$ m	18,068
Valuation of solar farms	HK\$ m	9,887
Valuation of distributed project	HK\$ m	336
Valuation of EPC	HK\$ m	55
Total valuation	HK\$ m	28,346
Total no. of shares	m	6,749
Value per share	HK\$	4.20
Net profit for Xinyi Solar in 17CL	HK\$ m	2,554
Implied 17CL PE	x	11.1

Source: CLSA

Overall valuation of HK\$28.3bn

Figure 11

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			40	40	40	40	40	40
- 100MW in Shou County, Anhui		100	100	100	100	100	100	100
- 20MW in Huainan, Anhui			20	20	20	20	20	20
- Addition in 2016CL			680	980	980	980	980	980
- Addition in 2017CL				700	1,000	1,000	1,000	1,000
Effective capacity (MW)	25	309	1,116	2,184	2,934	2,934	2,934	2,934
- 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
- 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		-	75	100	100	100	100	100
- 100MW in Wuwei County, Anhui		4	100	100	100	100	100	100
- 40MW in Fanchang County, Anhui			30	40	40	40	40	40
- 100MW in Shou County, Anhui		4	100	100	100	100	100	100
- 20MW in Huainan, Anhui			15	20	20	20	20	20
- Addition in 2016CL			245	980	980	980	980	980
- Addition in 2017CL				250	1,000	1,000	1,000	1,000
Total power generated (m kWh)¹	29	307	1,202	2,359	3,150	3,102	3,071	3,040
- 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			129	171	169	167	165	164
- 100MW in Lixin County, Anhui			82	108	107	106	105	104
- 100MW in Wuwei County, Anhui		4	109	108	107	106	105	104
- 40MW in Fanchang County, Anhui			33	43	43	42	42	41
- 100MW in Shou County, Anhui		4	109	108	107	106	105	104
- 20MW in Huainan, Anhui			17	22	22	21	21	21
- Addition in 2016CL			270	1,075	1,057	1,046	1,036	1,025
- Addition in 2017CL				275	1,095	1,067	1,057	1,046
FIT (Rmb/kWh) (excl. VAT)	0.85	0.83	0.82	0.80	0.79	0.79	0.79	0.79
- 250MW in Anhui	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
- 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
- Addition in 2016CL			0.95	0.95	0.95	0.95	0.95	0.95
- Addition in 2017CL				0.90	0.90	0.90	0.90	0.90
Utilisation hours	862	1,000	1,088	1,092	1,094	1,094	1,094	1,094
- 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	1,000	1,000	1,000	1,000	1,000	1,000
- 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

	2014	2015	2016CL	2017CL	2018CL	2019CL	2020CL	2021CL
- 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
Revenue (Rmb m)	24	255	981	1,884	2,473	2,436	2,412	2,387
- 250MW in Anhui	24	205	224	221	219	217	215	213
- 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			102	134	133	132	130	129
- 100MW in Lixin County, Anhui			68	89	89	88	87	86
- 100MW in Wuwei County, Anhui		3	90	89	89	88	87	86
- 40MW in Fanchang County, Anhui			27	36	35	35	35	34
- 100MW in Shou County, Anhui		3	90	89	89	88	87	86
- 20MW in Huainan, Anhui			14	18	18	18	18	17
- Addition in 2016CL			213	848	833	825	817	808
- Addition in 2017CL				205	818	797	789	781
Unit capex (Rmb/W)								
- 250MW in Anhui	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
- 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
- Addition in 2016CL			6.0	6.0	6.0	6.0	6.0	6.0
- Addition in 2017CL				5.8	5.8	5.8	5.8	5.8

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

XYG

Figure 12

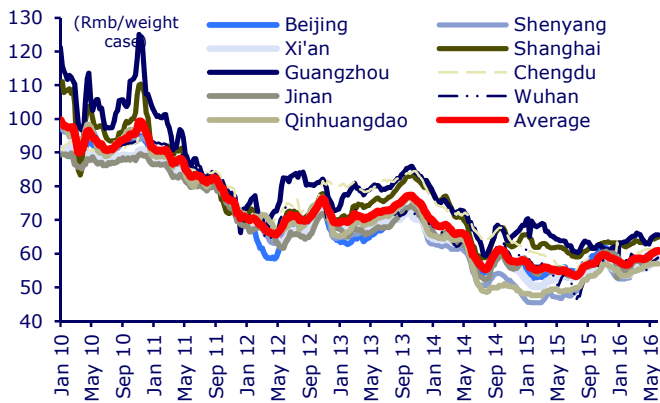
XYG – 1H16 profit alert

HK\$m	Lower end	Higher end	Mid-point
1H15 reported profit	945	945	
Expected growth	30%	45%	
1H16 profit range	1,228	1,370	1,299
1H15 core profit	772	772	
Implied YoY growth in core profit	59.0%	77.4%	
Old 1H16CL core profit forecast	1,205	1,205	1,205
Profit alert implied % beat to CL	1.9%	13.7%	7.8%
FY16 Bloomberg consensus	2,349	2,349	2,349
% achievement	52.3%	58.3%	55.3%

Source: Company, Bloomberg, CLSA

Figure 13

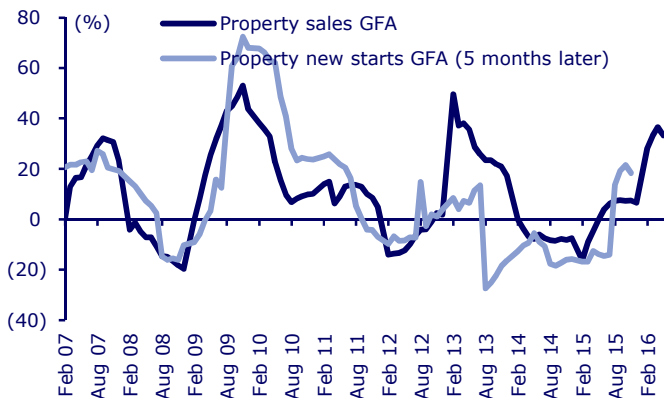
Price recovery for float glass since early 2016



Source: Wind, CLSA

Figure 15

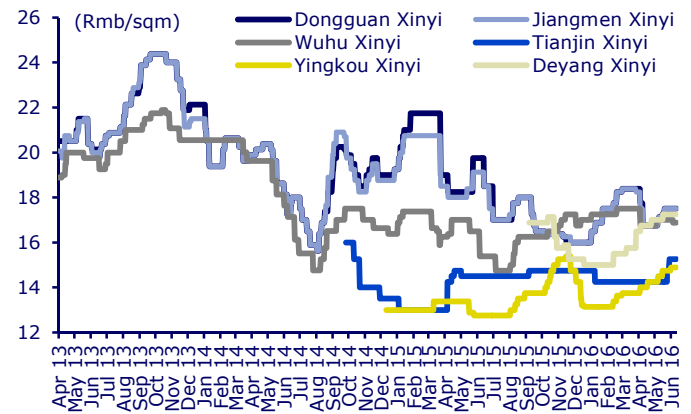
Property sales may lead to a recovery in property new starts...



Source: Wind, CLSA

Figure 14

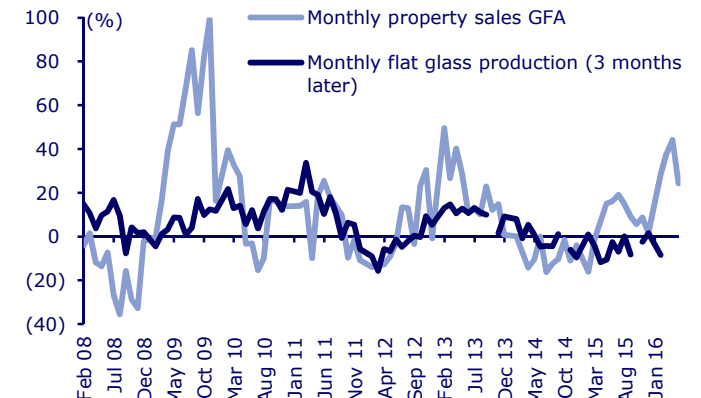
XYG's float glass price benefited



Source: Wind, CLSA

Figure 16

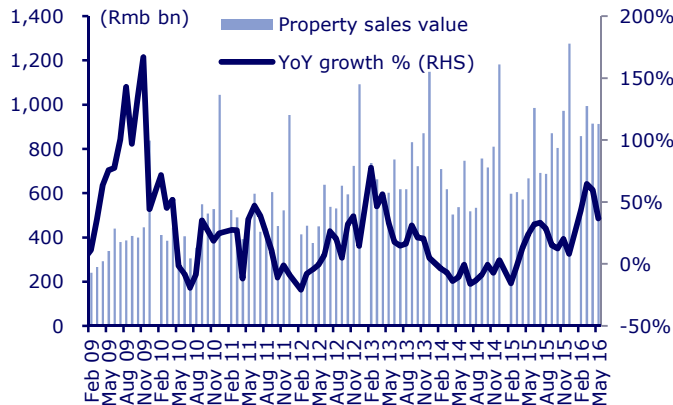
... and thus drive glass demand with a lag



Source: Wind, CLSA

Figure 17

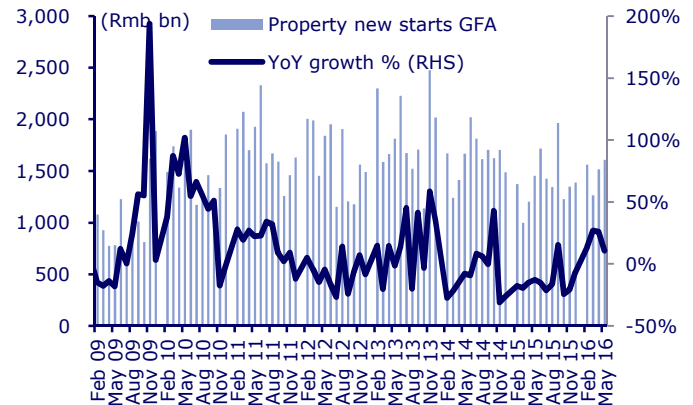
Meanwhile, property sales growth started to decelerate in May...



Source: Wind, CLSA

Figure 18

... as also did property new starts GFA



Source: Wind, CLSA

Figure 19

Earnings revisions

	16CL			17CL		
	New	Old	Change	New	Old	Change
Revenue (HK\$ m)	13,054	12,953	0.8%	13,325	13,222	0.8%
- Automobile glass products	4,018	3,975	1.1%	4,093	4,049	1.1%
- Construction glass	2,862	2,862	0.0%	2,756	2,756	0.0%
- Float glass (incl electronic glass)	6,137	6,079	1.0%	6,272	6,213	0.9%
- Wind farm	37	37	0.0%	204	204	0.0%
Gross profit margin	30.3%	30.0%	0.4 ppt	32.6%	32.3%	0.4 ppt
- Automobile glass products	45.9%	45.8%	0.1 ppt	48.4%	48.4%	0.1 ppt
- Construction glass	35.8%	35.8%	0.0 ppt	35.8%	35.8%	0.0 ppt
- Float glass (incl electronic glass)	17.3%	16.6%	0.8 ppt	19.7%	19.0%	0.7 ppt
- Wind farm	70.3%	70.3%	0.0 ppt	70.3%	70.3%	0.0 ppt
Core profit (HK\$ m)	2,693	2,527	6.6%	3,278	3,119	5.1%

Source: CLSA

Figure 20

XYG - Condensed half-yearly P&L

(HK\$m)	1H15	2H15	1H16CL	YoY growth
Sales	5,283	6,177	6,255	18.4%
Cogs (excl depr)	(3,525)	(4,039)	(3,941)	11.8%
Operating expenses (ex D&A)	(774)	(922)	(801)	3.5%
Core Ebitda	984	1,329	1,514	53.8%
Depreciation	(348)	(415)	(420)	20.7%
Amortisation	(16)	(16)	(16)	-2.4%
Core Ebit	620	898	1,078	73.8%
Other revenue (ex-interest exp)	152	64	125	-17.3%
Net interest expense	(20)	(30)	(21)	3.7%
Share of associates' profits	161	157	317	97.3%
Profit before tax	912	1,088	1,499	64.3%
Tax expense	(138)	(128)	(204)	47.5%
Minority interest	(2)	1	(2)	0.0%
Net profit after tax, pre-exceptionals	772	961	1,294	67.5%
Exceptional gain/(loss)	172	207	-	-100.0%
Net profit after tax	945	1,168	1,294	36.9%
... NPM, pre-exceptionals	14.6%	15.6%	20.7%	

Source: Company, CLSA

We now forecast XYG's 1H16 core profit to surge about 67% YoY

Figure 21

XYG - Financials					
Year to 31 December	14A	15A	16CL	17CL	18CL
Revenue (HK\$m)	10,861	11,460	13,054	13,325	13,831
Rev forecast change (%)	-	-	0.8	0.8	0.8
Adjusted net profit (HK\$m)	1,144	1,734	2,693	3,278	3,567
NP forecast change (%)	-	-	6.6	5.1	4.6
Adjusted EPS (HK¢)	28.4	43.0	67.2	82.2	89.4
CL/consensus (7) (EPS%)	-	-	112	114	104
Adj EPS growth (% YoY)	(45.3)	51.7	56.1	22.3	8.8
Adjusted PE (x)	20.5	13.5	8.6	7.1	6.5
Dividend yield (%)	2.6	4.6	5.9	7.2	7.8
ROE (%)	11.1	16.9	20.3	22.4	21.8
Net debt/equity (%)	42.0	37.2	38.7	27.4	16.0

Source: Company, Bloomberg, CLSA

We raise our target price from HK\$5.90 to HK\$6.50, which is based on a blended PE and PB approach. We apply a target multiple of 9x PE to 17CL EPS and a target multiple of 1.6x to 16CL BVPS – 1.4x previously; mainly a reflection of the company's improving profitability and returns (with 16CL ROE of 20% vs the 2009-13 average of 18%). YTD strong property sales imply a satisfactory peak season for float glass in 2H16; meanwhile slowing property sector growth in May is a concern, with its long-term visibility still uncertain.

Figure 22

Valuation of Xinyi Glass	
PE basis	
17CL EPS (HK\$)	0.83
Target multiple (x)	9.0
Fair value (HK\$)	7.50
PB basis	
16CL BVPS (HK\$)	3.45
Target multiple (x)	1.6
Fair value (HK\$)	5.50
Average (HK\$)	6.50
Implied 16/17CL PE	9.6x/7.8x

Source: CLSA

Figure 23

Valuation of Xinyi Glass's non-solar business			
(HK\$m)		16CL	17CL
Net profit of Xinyi Glass		2,693	3,278
Less: after-tax share of profits of Xinyi Solar		(411)	(469)
Non-solar profit	(a)	2,282	2,809
Current market cap of Xinyi Glass	(b)	22,509	22,509
Current market cap of Xinyi Solar	(c)	20,449	20,449
M'cap of Xinyi Glass's non-solar business	(d) = (b) - 29.5%*(c)	16,599	16,599
PE of Xinyi Glass's non-solar business	(e) = (d) / (a)	7.3	5.9

Source: CLSA

Valuation details - Xinyi Glass Holdings Ltd 868 HK

We value XYG using a blended PE and PB approach. We apply a target multiple of 9x to 17CL EPS and a target multiple of 1.6x to 16CL BVPS.

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

Our target is based on blended PE and PB approach

Current market cap implies 7.3x/5.9x its non-solar businesses earnings in 16/17CL

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. A greater-than-expected increase in industry float glass production capacity will put further pressure on product prices, particularly in a weak demand environment.

Valuation details - Xinyi Solar Holdings Ltd 968 HK

We value XYS using SOTP, with solar glass / EPC businesses using PE approach, and solar farm / DG projects using DCF valuation.

Investment risks - Xinyi Solar Holdings Ltd 968 HK

Key risks for the company include: 1) Change in governments' supportive stance on the solar sector, as the solar industry is still at a relatively early stage of development, which is boosted by 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 with the corresponding increase in the 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 also advance 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 develop new products. 4) Payment of government subsidy on solar projects as well as risk of curtailment, which will affect downstream project returns.

Figure 24

Xinyi Glass 12-month forward PE

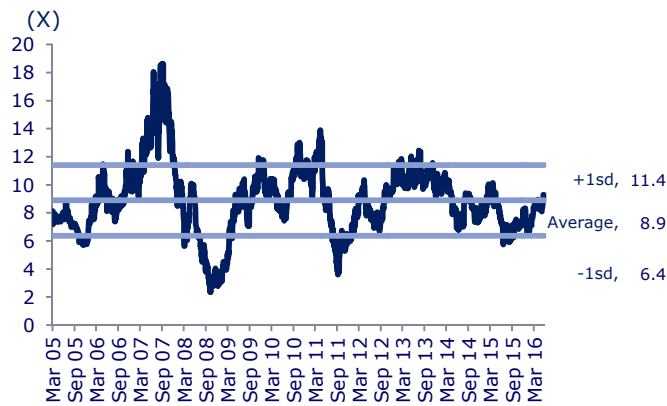
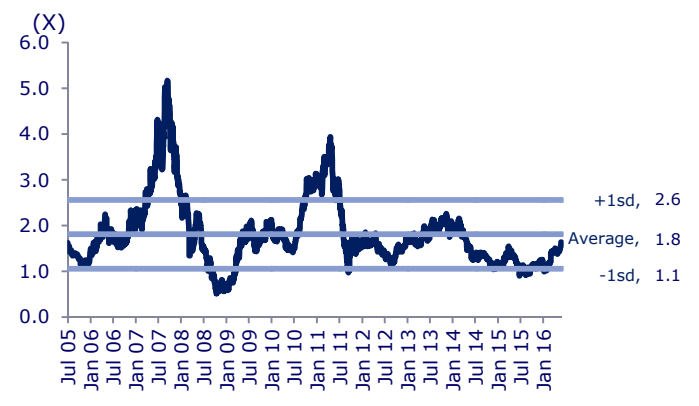


Figure 25

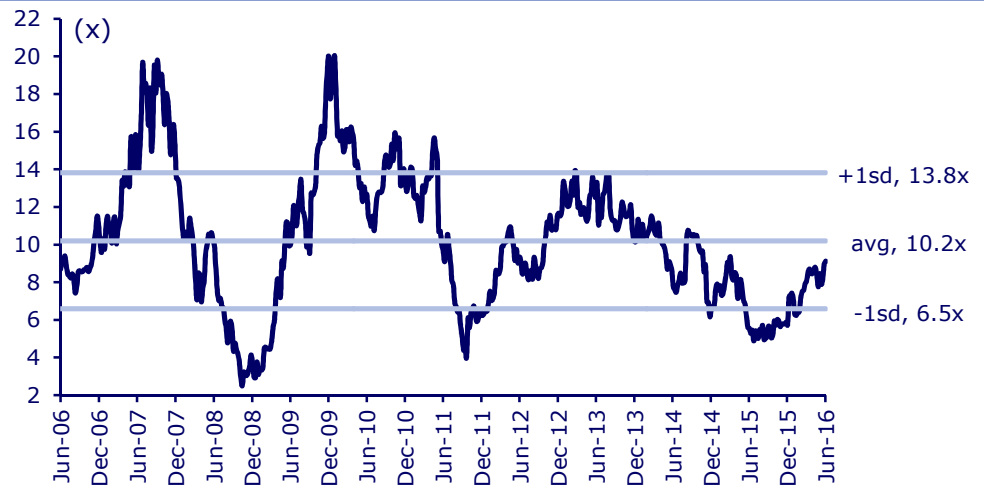
Xinyi Glass 12-month forward PB



Source: CLSA, DataStream

Figure 26

12-month forward PE - Xinyi Glass after stripping out Xinyi Solar at market price (since Dec-13)



Source: CLSA, DataStream

Figure 27

Xinyi Solar 12-month forward PE chart



Figure 28

Xinyi Solar 12-month forward PB chart



Source: CLSA, DataStream

Figure 29

Glass peer valuations

Stock	Ticker	Price (local)	Mkt Cap (USD,m)	ADTV (USD,m)	CLSA			12m forward valuations					EPS Cagr FY1-FY3	PEG	Gearing (%)	Performance (%)			
					Rec	Target	Upside	PE	PB	Yield	EV/Ebitda	ROE				1m	3m	6m	12m
Xinyi Glass	868 HK	5.80	2,901	7.3	O-PF	6.50	12%	7.9	1.5	6.5	7.1	21.2	15.4	0.5	37	11	26	37	33
Fuyao Glass - H	3606 HK	17.20	5,261	2.9				11.9	2.0	5.4	6.8	17.3	12.3	1.0	(7)	1	(0)	(5)	(21)
China Glass	3300 HK	0.86	201	0.1											65	(8)	1	(14)	(54)
Luoyang Glass	1108 HK	4.21	1,226	0.7											221	(4)	(5)	(22)	(45)
CSG Holding	000012 CH	10.86	2,749	31.0				24.3	2.5	2.8	10.8	10.3	20.7	1.2	65	2	5	(5)	(36)
Fuyao Glass - A	600660 CH	13.63	5,261	25.2				11.1	1.8	5.6	6.9	16.9	11.7	1.0	(7)	(3)	(3)	(9)	(20)
Yaohua Pilkington	600819 CH	6.08	811	5.3											46	(3)	(4)	(18)	(59)
Shandong Jinjing	600586 CH	4.15	918	16.3				124.2	1.5		7.9	4.2	53.2	2.3	57	0	(2)	(40)	(58)
AVIC Sanxin	002163 CH	6.62	807	17.0											265	(0)	(12)	(37)	(66)
Xiuqiang Glasswork	300160 CH	12.56	1,139	64.9				68.2	5.9		36.1	8.9	26.7	2.6	1	3	19	24	27
Changzhou Almaden	002623 CH	30.56	742	17.6				67.2	2.2			3.5	62.7	1.1	(7)	3	(0)	(33)	(41)
Zhuzhou Kibing	601636 CH	3.12	1,195	21.2				22.0	1.1		9.1	5.2	8.9	2.5	82	(2)	(19)	(44)	(45)
Taiwan Glass	1802 TT	13.45	1,041	1.0											67	1	(12)	19	(12)
Asahi Glass	5201 JP	581.00	6,509	33.0	O-PF	750.00	29%	17.7	0.6	3.1	3.2	3.5	25.0	0.7	31	(11)	(5)	(16)	(25)
Nippon Sheet Glass	5202 JP	78.00	665	10.0				13.1	0.7	0.1	6.7	5.2	37.1	0.4	333	(5)	(6)	(23)	(42)
Central Glass	4044 JP	495.00	1,004	6.0				9.4	0.6	2.2	5.2	6.1	(2.3)		23	(10)	(20)	(12)	(10)
Hankuk Glass Industries	002000 KS	28,150.00	241	0.0											(16)	(1)	12	16	(11)
Cie de St-Gobain	SGO FP	36.92	23,016	72.9				14.5	1.1	3.5	6.1	7.5	16.0	0.9	25	(4)	(3)	(3)	(10)
PPG Industries Inc	PPG US	107.69	28,652	148.4	O-PF	115.00	7%	16.0	5.2	1.3	10.9	32.7	10.7	1.5	59	1	3	10	(8)
Turkiye Sise	SISE TI	3.62	2,353	5.5				10.0	0.8	3.0	6.2	8.4	13.3	0.8	15	1	7	36	19
Trakya Cam Sanayii	TRKCM TI	2.23	683	4.6				11.1	0.7	3.1	7.4	5.9	25.5	0.4	14	8	17	44	(5)
Corning	GLW US	20.24	21,765	186.7	SELL	17.00	(16%)	15.0	1.4	3.1	7.9	9.0	2.0	7.5	(0)	8	4	12	(2)
Average								27.7	1.8	3.3	9.2	10.4	21.2	1.6	62.2				

Source: CLSA (for the covered companies), Bloomberg (for the rest)

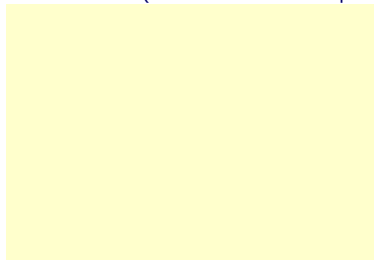


Figure 30

Global solar valuations

Stock	Ticker	Price (local)	Mkt Cap (USD,m)	ADTV (USD,m)	CLSA			12m forward valuations					Gearing (%)	Performance (%)				
					Rec	Target	Upside	PE	PB	Yield	EV/Ebitd	ROE		1m	3m	6m	12m	
Silicon																		
Wacker	WCH GR	79.34	4,641	9.6				23.4	1.5	2.5	5.1	7	38	(5)	1	8	(21)	
Tokuyama	4043 JP	256	846	12.5				7.9	1.2	0.0	4.9	16	205	(4)	45	(1)	(3)	
Sunedison	SUNE US											1	421					
OCI	010060 KS	92,400	1,868	22.0				11.3	0.7	0.3	6.9	8	64	(18)	(2)	24	6	
GCL	3800 HK	1.01	2,419	7.0	BUY	1.69	67%	5.8	0.7	0.0	6.8	14	171	(9)	(21)	(18)	(44)	
Xinte Energy	1799 HK	6.66	897	0.0									67	(7)	2			
Daqo	DQ US	22.09	230	1.8				5.2	0.8		4.8	16	103	(9)	16	37	(10)	
Ingots/Wafers																		
Sino-American	5483 TT	35.30	631	3.6				13.0		5.7	4.5	6	(1)	14	(11)	(19)	5	
PV Crystalox	PVCS LN	13.13	30	3.5									(28)	(3)	38	62	25	
Solargiga	757 HK	0.15	63	0.0									189	(10)	(19)	(21)	(56)	
Renesola	SOL US	1.30	132	0.4				18.2	1.1		6.6	7	621	7	(12)	(2)	(6)	
Green Energy Tech	3519 TT	21.40	273	3.6									84	16	(5)	(0)	56	
LDK Solar	LDKYQ US	0.04	9	0.0										76	1	(33)	(69)	
Comtec Solar	712 HK	0.51	91	0.1								3	40	(9)	(28)	(25)	(58)	
Cell																		
Motech	6244 TT	32.05	532	8.2									29	6	(17)	(22)	(4)	
Gintech	3514 TT	24.15	335	8.6				11.0	0.8	4.7	3.9	8	1	22	(21)	0	50	
Neosolar	3576 TT	17.20	540	4.6				729.3					24	10	(24)	(22)	(20)	
JA Solar	JASO US	6.97	332	4.6				5.0	0.3		3.0	5	34	(11)	(23)	(23)	(24)	
China Sunergy	CSUN US																	
Global PVQ	QCE GR	0.02	3	0.0									1,192	0	67	87	7	
Shenzhen Topraysolar	002218 CH	8.23	772	13.4				27.1	1.7		11.7	7	27	4	6	(19)	(54)	
Integrated Modules																		
Suntech	STPFQ US												188					
Hanwha Q CELLS	HSOL US											10	294					
Canadian Solar	CSIQ US	15.85	910	36.3				6.9	0.8	0.0	7.4	13	118	(6)	(19)	(36)	(52)	
Trina	TSL US	7.09	656	11.6				5.9	0.5	0.0	5.8	8	119	(11)	(33)	(33)	(45)	
Yingli Green Energy	YGE US	4.25	77	0.7							10.1	17		32	(11)	(26)	(66)	
Jinko Solar	JKS US	20.40	640	12.7				4.1	0.7	0.0	6.0	19	123	(1)	(12)	(15)	(33)	
Sunpower	SPWR US	15.23	2,102	37.3				10.5	1.3		6.7	19	42	(8)	(36)	(35)	(53)	
Solarworld	SWVK GR	6.35	106	0.7					0.3		4.2	(4)	92	(20)	(41)	(28)	(54)	
Hareon Technology	600401 CH	2.38	1,706	43.0									83	(5)	6	(17)	(58)	
Shunfeng	1165 HK	1.03	558	1.8									129	(18)	(33)	(49)	(78)	
First Solar	FSLR US	47.79	4,886	114.9				12.9	0.8		5.9	6	(28)	(2)	(33)	(18)	(5)	
Integrators and installers																		
United Photovoltaics	686 HK	0.58	362	0.7				6.0	0.9		6.7	16	313	(2)	(3)	(24)	(59)	
Singyes	750 HK	2.73	245	2.5	O-PF	3.15	15%	8.8	0.5	0.5	7.1	6	68	0	(36)	(49)	(74)	
SolarCity	SCTY US	20.77	2,042	138.7						0.0			(255)	142	6	(23)	(50)	(62)
West Holdings	1407 JP	638	164	0.5				5.3	1.0	5.5			17	(6)	(9)	(14)	(30)	
Equipment																		
GT Solar	GTATQ US			0.0										(64)				
Meyer Burger	MBTN SW	3.39	321	2.4					2.7	0.0	20.1	(19)	85	(5)	(36)	(34)	(63)	
Manz Automation	MSZ GR	31.00	269	1.1					1.3	0.0	42.5	(7)	39	(11)	(11)	(24)	(58)	
Applied Materials	AMAT US	23.94	26,074	273.5				14.0	3.7	1.7	10.1	28	(6)	22	20	33	22	
Hanergy Solar	566 HK	3.91	21,037										10	0	0	0	0	
Inverters, materials and consumables																		
SMA	S92 GR	44.08	1,715	9.2				17.2	2.3	1.4	6.4	12	(45)	(5)	2	(2)	117	
Gigasolar	3691 TT	459.50	864	13.8				9.9	3.2	5.5	7.7	35	39	(12)	(24)	(33)	(13)	
Xinyi Solar	968 HK	3.03	2,635	7.9	BUY	4.20	39%	8.8	2.6	5.4	8.4	32	10	(2)	8	(7)	(15)	
Xingda	1899 HK	1.66	318	0.4				11.6	0.4	7.1	4.6	5	(3)	6	18	3	(26)	
Solar Average								40.8	1.3	2.1	8.4	1	120					
HK-listed Solar Average								8.2	1.0	3.3	6.7	13	100					

Source: CLSA (for the covered companies), Bloomberg (for the rest)



Summary financials - XYX

Year to 31 December	2014A	2015A	2016CL	2017CL	2018CL
Summary P&L forecast (HK\$m)					
Revenue	2,410	4,750	6,758	7,831	9,293
Op Ebitda	597	1,432	2,992	3,925	4,850
Op Ebit	502	1,206	2,570	3,258	3,974
Interest income	2	5	9	9	8
Interest expense	(7)	(21)	(65)	(101)	(127)
Other items	87	143	199	211	211
Profit before tax	585	1,332	2,714	3,377	4,066
Taxation	(79)	(188)	(328)	(350)	(422)
Minorities/Pref divs	0	0	(224)	(473)	(608)
Net profit	506	1,144	2,162	2,554	3,037
Summary cashflow forecast (HK\$m)					
Operating profit	502	1,206	2,570	3,258	3,974
Operating adjustments	-	-	-	-	-
Depreciation/amortisation	94	226	421	667	876
Working capital changes	116	(580)	(613)	(131)	(178)
Net interest/taxes/other	0	(5)	(194)	(240)	(338)
Net operating cashflow	713	846	2,185	3,555	4,334
Capital expenditure	(2,381)	(3,583)	(5,563)	(6,730)	(3,699)
Free cashflow	(1,668)	(2,736)	(3,378)	(3,175)	635
Acq/inv/disposals	0	1,580	1,580	-	-
Int, invt & associate div	2	5	9	9	8
Net investing cashflow	(2,379)	(1,998)	(3,973)	(6,721)	(3,691)
Increase in loans	1,300	2,290	3,581	2,450	1,924
Dividends	(200)	(249)	(580)	(1,015)	(1,199)
Net equity raised/other	829	1,437	0	-	-
Net financing cashflow	1,929	3,478	3,001	1,435	725
Incr/(decr) in net cash	264	2,326	1,212	(1,732)	1,368
Exch rate movements	-	-	-	-	-
Opening cash	279	543	2,869	4,081	2,349
Closing cash	543	2,869	4,081	2,349	3,717
Summary balance sheet forecast (HK\$m)					
Cash & equivalents	543	2,869	4,081	2,349	3,717
Debtors	351	806	1,481	1,716	2,037
Inventories	299	199	473	548	650
Other current assets	0	0	0	0	0
Fixed assets	3,685	7,104	12,250	18,316	21,144
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	20,038	24,679	29,293
Short-term debt	143	474	947	1,271	1,525
Creditors	516	794	1,130	1,310	1,554
Other current liabs	633	1,441	1,441	1,441	1,441
Long-term debt/CBs	1,157	3,116	6,224	8,351	10,020
Provisions/other LT liabs	10	17	17	17	17
Minorities/other equity	0	1,146	2,950	3,423	4,031
Shareholder funds	3,306	5,745	7,327	8,866	10,703
Total liabs & equity	5,764	12,735	20,038	24,679	29,293
Ratio analysis					
Revenue growth (% YoY)	22.5	97.1	42.3	15.9	18.7
Ebitda growth (% YoY)	47.2	139.9	109.0	31.2	23.6
Ebitda margin (%)	24.8	30.1	44.3	50.1	52.2
Net profit margin (%)	21.0	24.1	32.0	32.6	32.7
Dividend payout (%)	46.3	49.5	47.0	47.0	47.0
Effective tax rate (%)	13.5	14.1	12.1	10.4	10.4
Ebitda/net int exp (x)	117.5	86.8	54.2	42.6	40.8
Net debt/equity (%)	22.9	10.5	30.1	59.2	53.1
ROE (%)	18.0	25.3	33.1	31.5	31.0
ROIC (%)	14.2	18.0	21.9	17.9	17.0
EVA@/IC (%)	3.8	7.6	11.5	7.5	6.6

Source: CLSA

Summary financials - XYG

Year to 31 December	2014A	2015A	2016CL	2017CL	2018CL
Summary P&L forecast (HK\$m)					
Revenue	10,861	11,460	13,054	13,325	13,831
Op Ebitda	1,740	2,313	3,181	3,756	3,976
Op Ebit	1,095	1,518	2,305	2,797	2,944
Interest income	53	40	52	48	41
Interest expense	(91)	(90)	(107)	(83)	(56)
Other items	536	912	871	1,000	1,150
Profit before tax	1,593	2,380	3,120	3,762	4,079
Taxation	(228)	(266)	(426)	(484)	(511)
Minorities/Pref divs	(1)	0	0	0	0
Net profit	1,364	2,113	2,693	3,278	3,567
Summary cashflow forecast (HK\$m)					
Operating profit	1,095	1,518	2,305	2,797	2,944
Operating adjustments	-	-	-	-	-
Depreciation/amortisation	644	795	876	959	1,032
Working capital changes	(559)	(207)	(289)	(9)	(67)
Net interest/taxes/other	(314)	(421)	(533)	(567)	(568)
Net operating cashflow	867	1,685	2,359	3,180	3,341
Capital expenditure	(1,729)	(1,967)	(1,700)	(1,500)	(1,300)
Free cashflow	(862)	(282)	659	1,680	2,041
Acq/inv/disposals	93	-	(618)	-	-
Int, invt & associate div	588	951	922	1,048	1,191
Net investing cashflow	(1,049)	(1,016)	(1,396)	(452)	(109)
Increase in loans	873	16	807	(1,531)	(1,437)
Dividends	(902)	(1,029)	(1,325)	(1,612)	(1,754)
Net equity raised/other	0	812	(265)	-	0
Net financing cashflow	(30)	(202)	(782)	(3,143)	(3,191)
Incr/(decr) in net cash	(211)	468	181	(414)	41
Exch rate movements	-	-	-	-	-
Opening cash	1,043	832	1,300	1,480	1,066
Closing cash	832	1,300	1,480	1,066	1,107
Summary balance sheet forecast (HK\$m)					
Cash & equivalents	832	1,300	1,480	1,066	1,107
Debtors	1,028	1,136	1,232	1,258	1,306
Inventories	1,478	1,223	1,473	1,436	1,477
Other current assets	1,467	1,337	1,337	1,337	1,337
Fixed assets	11,293	11,971	12,825	13,396	13,694
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	23,391	23,506	23,903
Short-term debt	2,529	2,514	2,850	2,212	1,613
Creditors	724	740	798	778	800
Other current liabs	1,548	1,705	1,705	1,705	1,705
Long-term debt/CBs	3,483	3,514	3,985	3,092	2,254
Provisions/other LT liabs	414	223	223	223	223
Minorities/other equity	2	7	7	7	7
Shareholder funds	12,333	12,718	13,823	15,488	17,301
Total liabs & equity	21,034	21,422	23,391	23,506	23,903
Ratio analysis					
Revenue growth (% YoY)	9.3	5.5	13.9	2.1	3.8
Ebitda growth (% YoY)	(37.7)	33.0	37.5	18.1	5.9
Ebitda margin (%)	16.0	20.2	24.4	28.2	28.7
Net profit margin (%)	12.6	18.4	20.6	24.6	25.8
Dividend payout (%)	44.4	50.5	50.8	50.6	50.6
Effective tax rate (%)	14.3	11.2	13.7	12.9	12.5
Ebitda/net int exp (x)	45.7	46.1	58.0	106.7	254.0
Net debt/equity (%)	42.0	37.2	38.7	27.4	16.0
ROE (%)	11.1	16.9	20.3	22.4	21.8
ROIC (%)	6.2	8.7	12.7	14.7	15.2
EVA@/IC (%)	(4.4)	(1.9)	2.1	4.1	4.5

Source: CLSA

Companies mentioned

Applied Materials (N-R)
Asahi Glass (5201 JP - ¥581 - OUTPERFORM)¹
AVIC Sanxin (N-R)
Canadian Solar (N-R)
Central Glass (N-R)
Changzhou Almaden (N-R)
China Glass (N-R)
China Sunergy (N-R)
Comtec Solar (N-R)
Corning (GLW US - US\$20.24 - SELL)²
CSG (N-R)
Daqo New Energy (N-R)
First Solar (N-R)
Fuyao Glass - H (N-R)
Fuyao Glass (N-R)
GCL-Poly (3800 HK - HK\$1.01 - BUY)¹
Gigasolar (N-R)
Gintech Energy (N-R)
Global PVQ (N-R)
Green Energy Tech (N-R)
GT Solar (N-R)
Hanergy (N-R)
Hankuk Glass Industries (N-R)
Hanwha Q Cells (N-R)
Hareon Technology (N-R)
JA Solar (N-R)
Jinjing (N-R)
JinkoSolar (N-R)
Kibing (N-R)
LDK Solar (N-R)
Luoyang Glass (N-R)
Manz Automation (N-R)
Meyer Burger (N-R)
Motech Industries (N-R)
Neosolar (N-R)
NSG (N-R)
OCI (N-R)
PPG (PPG US - US\$107.69 - OUTPERFORM)²
PV Crystalox (N-R)
Renesola (N-R)
Saint-Gobain (N-R)
Shenzhen Topraysolar (N-R)
Shunfeng (N-R)
Singyes Solar (750 HK - HK\$2.73 - OUTPERFORM)¹
Sino-American Silicon (N-R)
Sise Cam (N-R)
SMA (N-R)
SolarCity (N-R)
Solargiga Energy (N-R)
Solarworld AG (N-R)
Sunedison (N-R)
Sunpower (N-R)
Suntech Power (N-R)
SYP Glass (N-R)

Taiwan Glass (N-R)
 Tokuyama (N-R)
 Trakya Cam Sanayii (N-R)
 Trina Solar (N-R)
 United PV (N-R)
 Wacker Chem (N-R)
 West Holdings (N-R)
 Xingda (N-R)
 Xinte Energy (N-R)
 Xinyi Energy-saving Glass (Wuhu) Company Ltd (N-R)
 Xinyi Glass (868 HK - HK\$5.80 - OUTPERFORM)¹
 Xinyi Solar (968 HK - HK\$3.03 - BUY)¹
 Xiuqiang Glasswork (N-R)
 Yaohao Pilkington (N-R)
 Yingli Energy (N-R)
 Zhouzhou Kibing (N-R)

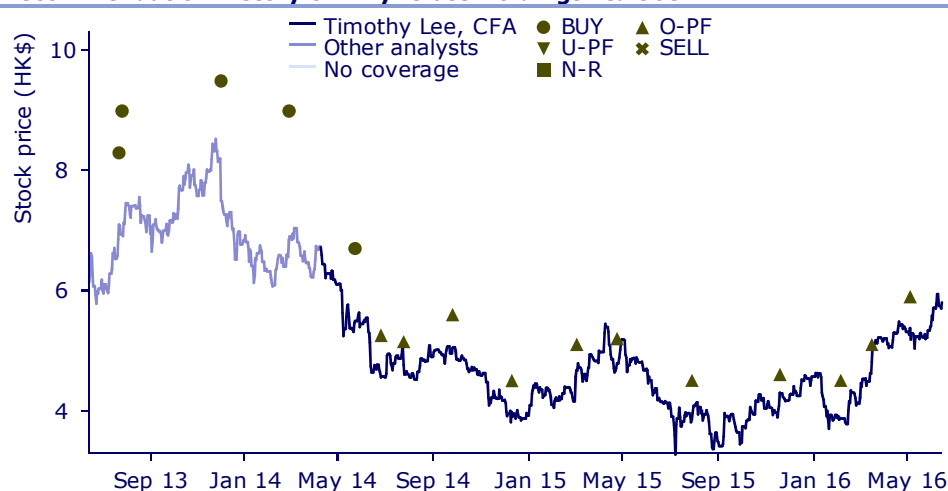
¹ Covered by CLSA; ² Covered by CLSA Americas

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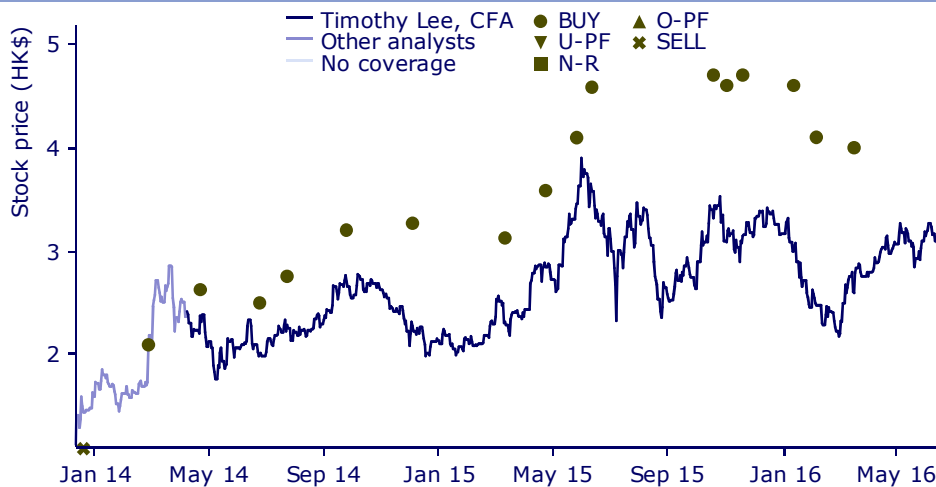
Recommendation history of Xinyi Glass Holdings Ltd 868 HK



Date	Rec	Target	Date	Rec	Target
04 May 2016	O-PF	5.90	25 Sep 2014	O-PF	5.60
16 Mar 2016	O-PF	5.10	24 Jul 2014	O-PF	5.15
05 Feb 2016	O-PF	4.50	25 Jun 2014	O-PF	5.25
19 Nov 2015	O-PF	4.60	23 May 2014	BUY	6.70
29 Jul 2015	O-PF	4.50	27 Feb 2014	BUY	9.00
24 Apr 2015	O-PF	5.20	02 Dec 2013	BUY	9.50
03 Mar 2015	O-PF	5.10	28 Jul 2013	BUY	9.00
10 Dec 2014	O-PF	4.50	24 Jul 2013	BUY	8.30

Source: CLSA

Recommendation history of Xinyi Solar Holdings Ltd 968 HK



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

Source: CLSA

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