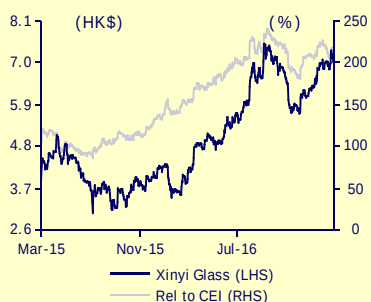


Stock performance (%)

	1M	3M	12M
Absolute	0.4	19.3	81.4
Relative	(4.4)	14.4	41.6
Abs (US\$)	0.4	0.0	81.8



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Financials

Year to 31 December	15A	16A	17CL	18CL	19CL
Revenue (HK\$m)	11,460	12,848	13,744	14,581	15,196
Rev forecast change (%)	-	-	(0.8)	1.6	-
Adjusted net profit (HK\$m)	1,734	3,055	3,758	4,181	4,568
NP forecast change (%)	-	-	3.6	4.5	-
Adjusted EPS (HK¢)	43.0	76.5	93.9	104.4	114.1
CL/consensus (9) (EPS%)	-	-	104	107	165
Adj EPS growth (% YoY)	51.7	77.8	22.7	11.2	9.3
Adjusted PE (x)	16.4	9.2	7.5	6.7	6.2
Dividend yield (%)	3.8	5.7	6.6	7.4	8.1
ROE (%)	16.9	24.8	26.6	25.8	24.7
Net debt/equity (%)	37.2	37.0	30.7	17.8	6.2

Source: CLSA

XYG FY16 core profit missed by 2%, due to 3.7% miss in revenue and higher-than-expected tax

All segment logged slightly lower than expected revenue

GPM was helped by lower cost

Tax expense is higher than expected

Core profit is 2.0% below our forecast; reported profit is in line with previous profit alert

2016 core profit 2% miss on revenue

XYG reported 2016 results with reported net profit (HK\$3,213m, +52.1% YoY) 2% above Bloomberg, but core profit (HK\$3,055m, +76.2% YoY) a 2.0% miss to CL. This is mainly due to a 3.7% miss in revenue (+12.1% YoY) for all segments (auto, construction, and float glasses) and higher-than-expected tax, offset by lower-than-expected OPEX. Meanwhile, GPM was in line, with float glass GPM expanded 16.4ppt YoY (to 36.3%) amid lower cost and ASP hike in 2H16.

Key highlights:

- Reported revenue was HK\$12,848m, up 12.1% YoY and 3.7% below our forecast. All segments logged slightly lower than expected revenue, including auto glass sales (-1.0% YoY, 5.8% miss), construction glass sales (-2.3% YoY, 3.7% miss) and float glass sales (+29.6% YoY, 2.0% miss), which is likely partly related to Rmb depreciation.
- Reported GPM was in-line, at 36.3%, +8.9ppt YoY. In particular, GPM for float glass was 27.5%, +16.4ppt YoY and 0.8ppt above us, thanks to NG price cut announced in Nov-16 to lower fuel cost, as well as significant ASP hike in 2H16. GPM for auto glass and construction glass also expanded on lower cost.
- OPEX was HK\$1,793m (+13.2% YoY), 2.8% below our forecasts, suggesting slightly better than expected efficiency despite the pre-operating expenses for the new Malaysia plant. Depreciation expense was HK\$797m (+4.4% YoY), also below our forecast by 6.9%.
- Share of associate profit was HK\$563m, up 77.3% YoY and 2.4% above us, due to significant increase in profit contribution from YYS.
- Meanwhile, tax expense was HK\$607m (+128.3% YoY), 14.1% above us given certain subsidiaries yet to enjoy preferential tax rates from being recognised as high-tech enterprises which are under applications.
- Reported net profit was up 52.1% YoY to HK\$3,213 m, in line with the previous profit alert (HK\$2,958-3,275m), and 2.4% above Bloomberg (HK\$3,139m). After adjusting for FX and fair value gains and last year's non-core items (FX, subsidiary disposal, deemed gain from YYS's placement), core profit was calculated to be HK\$3,055m, up 76.2% YoY and 2.0% below our forecast.
- The company declared a final dividend of 23.0 cents per share, implying full-year payout ratio of 48%.

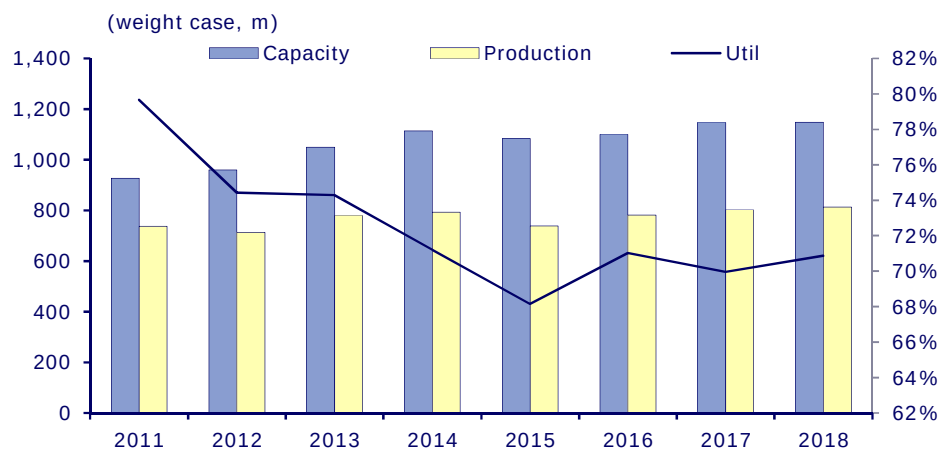
Figure 1

XYG FY16 earnings summary

HKD m	FY15A	FY16A	YoY growth	FY16CL	Forecast vs actual	1H16	2H16
Sales	11,460	12,848	12.1%	13,348	(3.7%)	5,885	6,963
COGS (excl depr)	(7,564)	(7,392)	(2.3%)	(7,658)	(3.5%)	(3,455)	(3,937)
Operating expenses (ex D&A)	(1,583)	(1,793)	13.2%	(1,844)	(2.8%)	(848)	(944)
...Opex %	13.8%	14.0%	1.0%	13.8%	1.0%	14.4%	13.6%
Core Ebitda	2,313	3,664	58.4%	3,846	(4.7%)	1,582	2,082
Depreciation	(763)	(797)	4.4%	(857)	(6.9%)	(389)	(408)
Core Ebita	1,550	2,867	85.0%	2,989	(4.1%)	1,193	1,674
Amortisation	(32)	(30)	(5.7%)	(31)	(3.4%)	(15)	(15)
Core Ebit	1,518	2,837	86.9%	2,958	(4.1%)	1,178	1,659
...Ebit Margin	13.2%	22.1%		22.2%		20.0%	23.8%
Other revenue (ex interest exp)	215	342	58.9%	208	64.3%	104	238
Interest Income	40	51	27.1%	53	(3.7%)	16	35
Interest Expense	(90)	(128)	41.5%	(118)	8.0%	(60)	(67)
Net Interest Expense	(50)	(77)	53.0%	(65)	17.5%	(44)	(33)
Share of Associate Profit	317	563	77.3%	549	2.4%	312	250
Profit Before Tax	2,000	3,665	83.2%	3,650	0.4%	1,550	2,115
Tax Expense	(266)	(607)	128.3%	(532)	14.1%	(202)	(405)
Minority Interest	0	(3)	499.8%	0	499.8%	0	(2)
Net Profit After Tax, pre Exceptionals	1,734	3,055	76.2%	3,117	(2.0%)	1,347	1,707
Exceptional gain/(loss)	379	159	(58.1%)	0	NA	22	137
Net Profit After Tax	2,113	3,213	52.1%	3,117	3.1%	1,369	1,844
... NPM, pre-exceptional	15.1%	23.8%		23.4%		22.9%	24.5%
Key operating statistics							
Sales (HKD m)							
Automobile glass products	3,787	3,748	(1.0%)	3,978	(5.8%)	1,990	1,758
Construction glass	2,651	2,590	(2.3%)	2,691	(3.7%)	1,220	1,370
Float glass	5,022	6,510	29.6%	6,643	(2.0%)	2,675	3,835
Wind farm		-	NA	37	(100.0%)		
Total	11,460	12,848	12.1%	13,348	(3.7%)	5,885	6,963
Gross profit (HKD m)							
Automobile glass products	1,679	1,836	9.3%	1,955	(6.1%)	837	867
Construction glass	898	1,032	15.0%	1,081	(4.5%)	383	556
Float glass	556	1,791	222.3%	1,771	1.1%	190	1,195
Wind farm		-	NA	26	(100.0%)		
Total	3,133	4,659	48.7%	4,833	(3.6%)	1,410	2,618
Gross margin							
Automobile glass products	44.3%	49.0%	4.6 ppt	49.1%	-0.2 ppt	48.7%	49.3%
Construction glass	33.9%	39.9%	6 ppt	40.2%	-0.3 ppt	39.0%	40.6%
Float glass	11.1%	27.5%	16.4 ppt	26.7%	0.8 ppt	22.3%	31.2%
Wind farm			NA	70.3%	NA		
Overall	27.3%	36.3%	8.9 ppt	36.2%	0.1 ppt	24.0%	37.6%

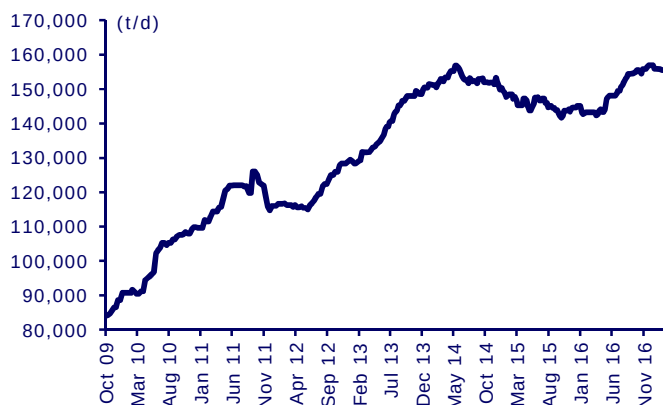
Source: Company, CLSA

Figure 4

Float glass demand/supply dynamics

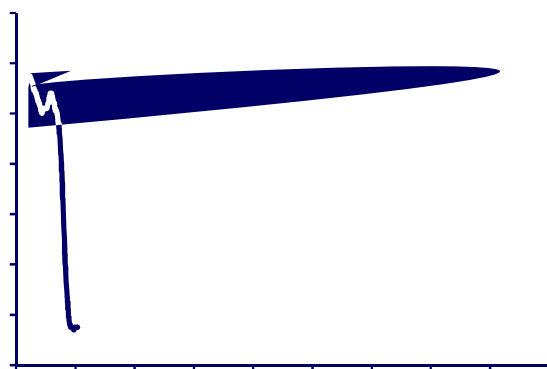
Source: CLSA

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

More supply discipline

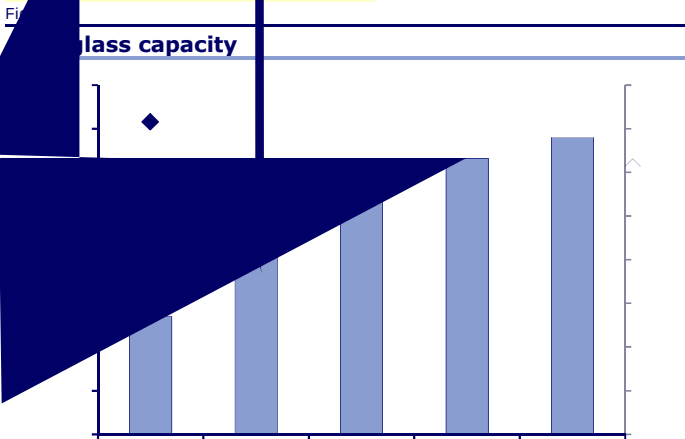
The China Architectural and Industrial Glass Association proposed last year to setup a fund to subsidise elimination of excess capacity in the float glass industry. They are proposing a surcharge of c.Rmb0.052/kWh for each unit of electricity used for all glass capacity in China for 5 consecutive years, or Rmb0.26/kWh for 1 year. The fund collected will be used for compensation for shutting down glass capacity on the basis of Rmb10/weight case. The proposal would be submitted for government studying.

Glass industry is not yet on the top of the government's supply side reform agenda, probably due to the relatively larger no. of private companies in the industry but less SOEs, which also implies low market concentration. Supply has been mainly controlled by: 1) Pollution controls, e.g. some outdated capacity was asked to stop production in late 4Q16 in northern China; and, more importantly, 2) Industry discipline. Glass production lines have to run 24x7 once started operation, thus producers can only cut prices to reduce inventory when demand is not good. If demand/price is too weak to support profitability, producer will choose to shut down operation which takes at least 6-9 months to resume operation which is also very costly.

The surcharge proposal is not completely new to the materials industry, but we believe execution is the key, given the bulk of small private players in the industry. The incremental cost is roughly c.7-8% above current tariff, or <1% of overall glass production cost, thus we believe this will not face a lot of pushback from large producers but still could likely have some oppositions from small players. Although XYG's management disagrees with this surcharge plan, overall we believe this implies a relatively positive industry supply outlook for the whole industry, which is also supported by stricter pollution controls which may trigger occasional distortion to market supply.

Further expansions

Total Capex budget for 2017 is HK\$2.5bn (2016: HK\$1.85bn), mainly for Malaysia's expansion and investment property at Qianhai. In particular, the first phase project in Malaysia started operation in Jan-2017. With the expected good profitability, XYG will invest the second phase with two float glass lines (2,000t/d in total) expected to commence operation by 2Q18. Besides, XYG will also further improve operating efficiency of auto glass and construction glass facilities despite no/limited capacity growth, which will help support steady sales performance despite impact from Rmb depreciation.



Source: Company, CLSA

Figure 9

Float glass capacity

Figure 8

Low-E glass capacity

Source: Company, CLSA

Figure 10

XYG's Capex plan

Source: Company, CLSA

Source: Company, CLSA

Figure 14

Figure 15

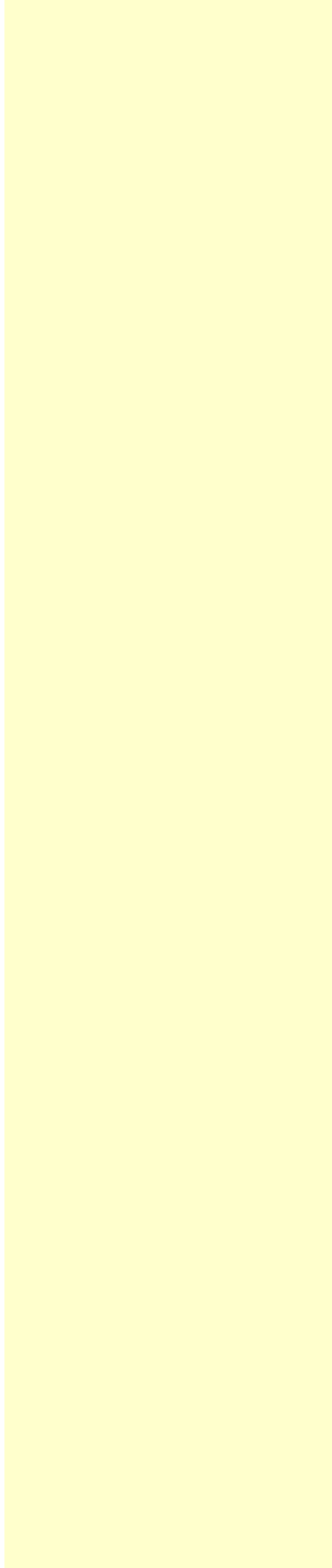


Figure 17

Valuation comp – Xinyi Glass

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	7.04	3,531	9.4	BUY	8.35	19%								37	0	22	5	92
Fuyao Glass - H	3606 HK	24.20	7,274	6.6				15.3	2.7	4.2	8.8	18.3	10.1	1.5	4	5	3	19	57
China Glass	3300 HK	0.90	210	0.1											47	7	0	(18)	11
Luoyang Glass	1108 HK	5.71	388	1.1											221	9	2	23	36
CSG Holding	000012 CH	11.63	2,806	72.3				23.3							65	2	(16)	(4)	21
Fuyao Glass - A	600660 CH	19.54	7,274	36.8				14.2	2.5	4.4	8.8	18.2	9.2	1.5	4	4	3	19	49
Yaohua Pilkington	600819 CH	9.08	1,129	19.3											46	10	21	15	52
Shandong Jinjing	600586 CH	4.87	1,034	13.4				9.9	1.5		9.3	7.4	3.4	2.9	57	6	4	4	24
AVIC Sanxin	002163 CH	10.24	1,198	62.4											265	10	20	29	49
Xiuqiang Glasswork	300160 CH	13.00	1,131	17.3				41.4	3.0		26.5	12.1	40.9	1.0	1	14	(2)	(3)	29
Changzhou Almaden	002623 CH	37.51	874	27.3											(7)	2	(21)	7	27
Zhuzhou Kibing	601636 CH	4.44	1,686	24.4				15.5	1.7		7.0	11.8	15.9	1.0	82	5	5	9	30
Taiwan Glass	1802 TT	17.55	1,665	2.5				43.9	1.1			3.1			67	33	30	35	37
Asahi Glass	5201 JP	918.00	9,694	40.6	BUY	1,025	12%								25	9	24	40	68
Nippon Sheet Glass	5202 JP	844.00	679	11.3				10.3	0.9	0.4	6.6	8.3	30.4	0.3	333	(9)	5	6	17
Central Glass	4044 JP	513.00	981	5.2				10.8	0.6	2.1	5.9	5.4	4.9	2.2	23	(5)	13	30	(20)
Hankuk Glass Industries	002000 KS	27,750.00	248	0.0											(16)	3	1	1	14
Cie de St-Gobain	SGO FP	45.25	26,631	70.6				15.7	1.2	2.9	7.1	8.0	13.5	1.2	29	(1)	11	15	26
PPG Industries Inc	PPG US	102.45	26,339	157.2				16.2	5.4	1.6	10.6	34.5	9.6	1.7	52	2	7	(3)	6
Turkiye Sise	SISE TI	3.93	2,232	4.7				10.4	0.9	3.0	6.2	10.0	14.1	0.7	15	(3)	18	15	25
Trakya Cam Sanayii	TRKCM TI	3.00	773	1.7				9.1	0.8	5.8	6.8	9.3	(18.0)		14	(3)	7	20	74
Corning	GLW US	27.65	25,662	186.6				16.3	1.7	2.2	8.1	10.3	6.6	2.5	(8)	4	15	22	51
Average								18.0	1.9	3.0	9.3	12.0	11.7	1.5	61.5				

Source: Bloomberg, CLSA

Valuation details

We value XYG using a blended PE and PB approach. We apply a target multiple of 9x to 18CL EPS and a target multiple of 1.9x to 17CL BVPS, in line with the historical averages.

Investment risks

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 - Asahi Glass Co Ltd 5201 JP

We value the stock using a PE valuation methodology as the company's earnings trends has brightened as chemicals and flat glass earnings growth offsets LCD weakness. We forecast Asahi Glass to see revenue and operating profit growth in the medium term as the US and Eurozone economies improve and chemicals experience success with new products along with growth in Southeast Asia. Our target price of ¥1,025 is based on a PE of 18x, which is the three-year average, FY12/18CL estimates.

Investment risks - Asahi Glass Co Ltd 5201 JP

Fluctuating fuel costs are a risk because almost all of its businesses consume large amounts of fuel and materials. A US\$1 fall in oil prices adds ¥400mn to OP. An increase in oil prices would cause a decline in profits. We expect the LCD substrate market to continue to see price cuts, but if weakness in downstream markets put more pressure on prices they may decline more than our expectations. The company is expecting ¥30bn in non-operating costs, but we are assuming ¥20bn. If non-operating costs reach ¥30bn, net profits would drop which would affect our PB-ROE correlation derived PB multiple.



Summary financials

Year to 31 December	2015A	2016A	2017CL	2018CL	2019CL
Summary P&L forecast (HK\$m)					
Revenue	11,460	12,848	13,744	14,581	15,196
Op Ebitda	2,313	3,664	4,392	4,897	5,277
Op Ebit	1,518	2,837	3,485	3,890	4,194
Interest income	40	51	48	28	30
Interest expense	(90)	(128)	(90)	(73)	(38)
Other items	912	1,063	969	1,061	1,168
Profit before tax	2,380	3,823	4,412	4,906	5,354
Taxation	(266)	(607)	(651)	(722)	(782)
Minorities/Pref divs	0	(3)	(3)	(3)	(3)
Net profit	2,113	3,213	3,758	4,181	4,569
Summary cashflow forecast (HK\$m)					
Operating profit	1,518	2,837	3,485	3,890	4,194
Operating adjustments	-	-	-	-	-
Depreciation/amortisation	795	827	906	1,008	1,083
Working capital changes	(207)	(426)	(109)	(93)	(68)
Net interest/taxes/other	(421)	(784)	(741)	(795)	(820)
Net operating cashflow	1,685	2,453	3,541	4,010	4,389
Capital expenditure	(1,967)	(1,853)	(2,500)	(1,500)	(1,500)
Free cashflow	(282)	600	1,041	2,510	2,889
Acq/inv/disposals	-	-	-	-	-
Int, invt & associate div	951	1,112	1,014	1,086	1,195
Net investing cashflow	(1,016)	(741)	(1,486)	(414)	(305)
Increase in loans	16	1,646	(1,907)	(1,508)	(1,827)
Dividends	(1,029)	(1,622)	(1,817)	(2,021)	(2,208)
Net equity raised/other	812	(267)	0	0	-
Net financing cashflow	(202)	(244)	(3,724)	(3,529)	(4,035)
Incr/(decr) in net cash	468	1,468	(1,669)	67	49
Exch rate movements	-	-	-	-	-
Opening cash	832	1,300	2,768	1,099	1,166
Closing cash	1,300	2,768	1,099	1,166	1,216
Summary balance sheet forecast (HK\$m)					
Cash & equivalents	1,300	2,768	1,099	1,166	1,216
Debtors	1,136	1,036	1,162	1,233	1,285
Inventories	1,223	1,321	1,292	1,347	1,387
Other current assets	1,337	1,412	1,412	1,412	1,412
Fixed assets	11,971	11,831	13,453	13,974	14,419
Intangible assets	1,281	1,193	1,164	1,135	1,108
Other term assets	3,174	4,462	4,462	4,462	4,462
Total assets	21,422	24,022	24,044	24,729	25,287
Short-term debt	2,514	3,165	2,379	1,757	1,003
Creditors	740	789	777	810	834
Other current liabs	1,705	2,046	2,046	2,046	2,046
Long-term debt/CBs	3,514	4,509	3,389	2,503	1,429
Provisions/other LT liabs	223	266	266	266	266
Minorities/other equity	7	66	66	66	66
Shareholder funds	12,718	13,181	15,122	17,282	19,643
Total liabs & equity	21,422	24,022	24,044	24,729	25,287
Ratio analysis					
Revenue growth (% YoY)	5.5	12.1	7.0	6.1	4.2
Ebitda growth (% YoY)	33.0	58.4	19.9	11.5	7.8
Ebitda margin (%)	20.2	28.5	32.0	33.6	34.7
Net profit margin (%)	18.4	25.0	27.3	28.7	30.1
Dividend payout (%)	50.5	49.7	49.7	49.7	49.7
Effective tax rate (%)	11.2	15.9	14.8	14.7	14.6
Ebitda/net int exp (x)	46.1	47.7	104.3	110.0	616.8
Net debt/equity (%)	37.2	37.0	30.7	17.8	6.2
ROE (%)	16.9	24.8	26.6	25.8	24.7
ROIC (%)	8.7	15.7	18.6	19.3	20.2
EVA@/IC (%)	(2.9)	4.1	6.9	7.7	8.6

Source: CLSA

Improving margins and higher associates profit to drive earnings growth

Capex mainly on wind farm and Malaysia investments

Balance sheet still healthy

Improving ROE

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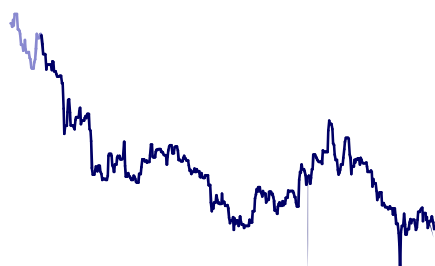
Xinyi Glass (868 HK - HK\$7.04 - BUY)
Asahi Glass (5201 JP - ¥918 - BUY)
AVIC Sanxin (N-R)
Central Glass (N-R)
Changzhou Almaden (N-R)
China Glass (N-R)
Cie de St-Gobain (N-R)
Corning (N-R)
CSG - A (N-R)
Fuyao Glass - A (N-R)
Fuyao Glass (N-R)
Hankuk Glass Ind (N-R)
Jinjing (N-R)
Kibing (N-R)
Luoyang Glass (N-R)
NSG (N-R)
PPG (N-R)
Sise Cam (N-R)
SYP Glass - A (N-R)
Taiwan Glass (N-R)
Trakya Cam Sanayii (N-R)
Xinyi Solar (968 HK - HK\$2.73 - BUY)
Xiuqiang Glasswork (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

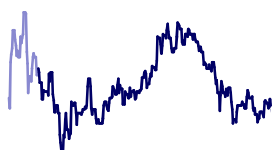
Recommendation history of Xinyi Glass Holdings Ltd 868 HK



Date	Rec	Target	Date	Rec	Target
14 Dec 2016	BUY	8.35	29 Jul 2015	O-PF	4.24*
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*			

Source: CLSA; * Adjusted for corporate action

Recommendation history of Xinyi Solar Holdings Ltd 968 HK



Date	Rec	Target	Date	Rec	Target
28 Feb 2017	BUY	3.40	12 Jun 2015	BUY	4.58
14 Dec 2016	BUY	3.50	27 May 2015	BUY	4.10
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			

Source: CLSA

Recommendation history of Asahi Glass Co Ltd 5201 JP

Date	Rec	Target	Date	Rec	Target
07 Feb 2017	BUY	1,025.00	17 May 2016	O-PF	750.00
31 Oct 2016	O-PF	780.00	09 May 2016	U-PF	710.00
06 Sep 2016	BUY	780.00	05 Feb 2016	U-PF	740.00
01 Aug 2016	BUY	750.00	20 Oct 2015	BUY	860.00

Source: CLSA

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