台灣玻璃工業公司

TAIWAN GLASS IND. CORP.

2024 ANNUAL BRIEF

台玻創業60周年

60th Anniversary of TGI

目錄 Table of Contents

生產基地 Production Facilities

台灣玻璃工業股份有限公司 TGI　1964年成立 Establishment
TAIWAN GLASS IND. CORP.

平板玻璃 Flat Glass

台灣台中廠 TF
TAIWAN TAICHUNG FACTORY
1983年投產
浮板玻璃 / 加工玻璃 / Float Glass / Processed Glass
微薄玻璃 / Ultra-Thin Glass

台灣鹿港平板廠 TF-4
TAIWAN LUKANG FLAT GLASS FACTORY
2006年投產
浮板玻璃 / Float Glass

台灣彰濱廠 TC
TAIWAN CHANGPIN FACTORY
2011年投產
低輻射玻璃 / 加工玻璃
Low-E Glass / Processed Glass

台玻青島玻璃有限公司 QFG
TG QINGDAO GLASS CO., LTD.
1993年成立
浮板玻璃 / 加工玻璃
Float Glass / Processed Glass

台玻長江玻璃有限公司 CFG
TG CHANGJIANG GLASS CO., LTD.
1994年成立
浮板玻璃 / 加工玻璃 / 低輻射玻璃
Float Glass / Processed Glass / Low-E Glass

台玻咸陽玻璃有限公司 TXY
TG XIANYANG GLASS CO., LTD.
2010年成立
浮板玻璃 / 加工玻璃 / 低輻射玻璃
Float Glass / Processed Glass / Low-E Glass


TF, 250,068 M^2 (375 畝)


TF-4, 260,343 M^2 (395 畝)


TC, 272,480 M^2 (408 畝)


QFG, 429,126 M^2 (643 畝)


CFG , 404,770 M^2 (607 畝)


TXY, 452,703 M^2 (679 畝)

生產基地 Production Facilities

台玻成都玻璃有限公司 CDG
TG CHENGDU GLASS CO., LTD.
2002年成立
浮板玻璃 / 加工玻璃 / 低輻射玻璃
Float Glass / Processed Glass / Low-E Glass

台玻華南玻璃有限公司 HNG
TG HUANAN GLASS CO., LTD.
2003年成立
浮板玻璃 / 加工玻璃 / 低輻射玻璃
Float Glass / Processed Glass / Low-E Glass

台玻東海玻璃有限公司 DHG
TG DONGHAI GLASS CO., LTD.
2003年成立
浮板玻璃 / 平板玻璃
Float Glass / Flat Glass

台玻天津玻璃有限公司 TJG
TG TIANJIN GLASS CO., LTD.
2004年成立
浮板玻璃 / 加工玻璃 / 低輻射玻璃
Float Glass / Processed Glass / Low-E Glass

台玻安徽玻璃有限公司 TAH
TG ANHUI GLASS CO., LTD.
2010年成立
浮板玻璃 / Float Glass

台玻太倉工程玻璃有限公司 TTAR
TG TAICANG ARCHITECTURAL GLASS CO., LTD.
2010年成立
低輻射玻璃 / Low-E Glass

台玻武漢工程玻璃有限公司 TWAR
TG WUHAN ARCHITECTURAL GLASS CO., LTD.
2010年成立
低輻射玻璃 / Low-E Glass


CDG, 452,027 M^2 (678 畝)


HNG, 364,907 M^2 (547 畝)


DHG, 398,096 M^2 (597 畝)


TJG, 300,448 M^2 (450 畝)


TAH, 572,643 M^2 (858 畝)


TTAR, 199,525 M^2 (300 畝)


TWAR, 222,000 M^2 (333 畝)

生產基地 Production Facilities

玻璃纖維增強絲 / 玻璃纖維布
Fiberglass Reinforced / Fiberglass Fabric

台灣桃園廠 TT
TAIWAN TAOYUAN FACTORY
1990年投產
玻璃纖維增強絲 / 玻璃纖維布
Fiberglass Reinforced / Fiberglass Fabric

台灣鹿港廠 TL
TAIWAN LUKANG FACTORY
1998年投產
玻璃纖維布 / Fiberglass Fabric

台嘉蚌埠玻璃纖維有限公司 TBF
TAICHIA BENGBU GLASS FIBER CO., LTD.
2012年成立
玻璃纖維布 / Fiberglass Fabric

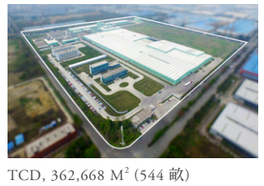
台嘉玻璃纖維有限公司 TGF
TAICHIA GLASS FIBER CO., LTD.
2001年成立
玻璃纖維布 / Fiberglass Fabric

台嘉成都玻纖有限公司 TCD
TAICHIA CHENGDU GLASS FIBER CO., LTD.
2011年成立
玻璃纖維布 / Fiberglass Fabric


TT, 181,181 M^2 (271 畝)


TL, 260,343 M^2 (395 畝)


TGF, 323,539 M^2 (485 畝)


TCD, 362,668 M^2 (544 畝)


TBF, 370,668㎡(557畝)

生產基地 Production Facilities

容食廚玻璃
Glass Container / Glass Tableware & Glass Kitchenware

台灣新竹廠 TS
TAIWAN HSINCHU FACTORY
1967年投產
容器玻璃 / 食器玻璃 / 廚器玻璃
Glass Container / Glass Tableware / Glass Kitchenware

汽車玻璃
Automotive Glass

台灣汽車玻璃有限公司 TAGC
TAIWAN AUTOGLASS IND. CORP.
1988年成立
汽車玻璃 / Automotive Glass

台玻悅達汽車玻璃有限公司 TYAU
TG YUEDA AUTOGLASS CO., LTD.
2010年成立
汽車玻璃 / Automotive Glass

鹽化工
Salt Chemical

實聯化工江蘇有限公司 SCJ
SHIHLIEN CHEMICAL INDUSTRIAL JIANGSU CO., LTD.
2009年成立
純碱 / 氯化銨 / 生技鹽 / 超純氨
Soda Ash / Ammonium Chloride / Biotech Salt / Ultra Pure Ammonia


TS, 129,090 M^2 (173 畝)


TYAU, 132,755 M2 (199 畝)


SCJ, 2,000,010 M^2 (3,000 畝)

集團一覽 Company List

截至2024-03-31

項目 Item	創立 Est.	資本額 Capital 千元	資本額 Capital U$000	營業項目 Business Scope	主要股東 Major Shareholder	持股率 Holding %
台灣玻璃工業股份有限公司 TGI Taiwan Glass Ind. Corp.	1964	29,080,608	–	玻璃製造 Glass Mfg.	THG	63
台灣玻璃美國銷售有限公司 TGUS Taiwan Glass USA Sales Corp.	1973	–	461	玻璃銷售 Glass Sales	TGI	100
台灣汽車玻璃股份有限公司 TAGC Taiwan Autoglass Ind. Corp.	1988	300,000	–	汽車玻璃製造 Automotive Glass Mfg.	TGI	87
台灣玻璃中國控股有限公司 TGCH Taiwan Glass China Holding Ltd.	1993	–	1,120,000	大陸投資控股公司 China Investment	TGI	94
台玻青島玻璃有限公司 QFG TG Qingdao Glass Co., Ltd.	1993	–	87,800	平板玻璃製造 Flat Glass Mfg.	TGCH	100
青島壓花玻璃有限公司 QRG Qingdao Rolled Glass Co., Ltd.	1993	–	29,293	壓花玻璃製造 Rolled Glass Mfg.	TG-G	100
台玻長江玻璃有限公司 CFG TG Changjiang Glass Co., Ltd.	1994	–	94,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台嘉玻璃纖維有限公司 TGF Taichia Glass Fiber Co., Ltd.	2001	–	110,000	玻璃纖維布製造 Fiberglass Fabric Mfg.	TGCH	100
台玻成都玻璃有限公司 CDG TG Chengdu Glass Co., Ltd.	2002	–	70,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台玻華南玻璃有限公司 HNG TG Huanan Glass Co., Ltd.	2003	–	106,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台玻東海玻璃有限公司 DHG TG Donghai Glass Co., Ltd.	2003	–	80,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台玻天津玻璃有限公司 TJG TG Tianjin Glass Co., Ltd.	2004	–	96,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台玻咸陽玻璃有限公司 TXY TG Xianyang Glass Co., Ltd.	2010	–	100,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台玻太倉工程玻璃有限公司 TTAR TG Taicang Architectural Glass Co., Ltd.	2010	–	35,000	Low-E 玻璃製造 Low-E Glass Mfg.	TGCH	100
台玻悅達汽車玻璃有限公司 TYAU TG Yueda Autoglass Co., Ltd.	2010	–	68,000	汽車玻璃製造 Automotive Glass Mfg.	TG-G	60
台玻安徽玻璃有限公司 TAH TG Anhui Glass Co., Ltd.	2010	–	85,000	平板玻璃製造 Flat Glass Mfg.	TGCH	100
台玻武漢工程玻璃有限公司 TWAR TG Wuhan Architectural Glass Co., Ltd.	2010	–	73,805	Low-E 玻璃製造 Low-E Glass Mfg.	TGCH	100
台嘉成都玻纖有限公司 TCD Taichia Chengdu Glass Fiber Co., Ltd.	2011	–	153,000	玻璃纖維布製造 Fiberglass Fabric Mfg.	TGCH	100
台嘉蚌埠玻璃纖維有限公司 TBF Taichia Bengbu Glass Fiber Co., Ltd.	2012	–	60,000	玻璃纖維布製造 Fiberglass Fabric Mfg.	TGCH	100
台玻文教基金會 TG-F TG Cultural & Educational Foundation	1989	170,000	–	文教事業 Cultural & Educational Fdn.	TGI	100
總資本額 Total		29,550,608	2,368,359			

2023 年度營運報告 2023 Operation Report

2023年度營運報告

	2023/2022	
銷售量	3,494千公噸(+9.6%)	
營業收入	45,619百萬元(+4%)	=U$ 1,464 mil
營業損失	(277)百萬元(-62.8%)	= U$ (9) mil
營業外收支	564百萬元(-58.8%)	= U$ 18 mil
稅前淨利	287百萬元(-40.3%)	= U$ 9 mil
稅後淨利	25百萬元(-103%)	= U$ 1 mil
稅後淨利歸屬於母公司業主	35百萬元(-104.8%)	= U$ 1 mil
母公司業主權益	47,555百萬元(-1.8%)	= U$ 1,549 mil
股票市值	55,108百萬元(-10.8%)	= U$ 1,795 mil

每股純益 0.01元，股東權益每股16.35元=U$0.53，
考量次年度資本預算規劃，2023年度擬不配發股東股息。

2023 年生產

平板玻璃	台灣 大陸	台中廠平板玻璃1座及鹿港廠平板玻璃1座，計2座生產線，年產 291千公噸 (-6.1%) 昆山、成都、天津、東莞、青島、東海、咸陽及安徽廠平板玻璃，計11座生產線，年產 2,508千公噸 (-5.3%)
玻布 / 玻纖	台灣 大陸	桃園廠玻纖1座及鹿港廠玻布1座，計2座生產線，年產 47千公噸 (-35.3%) 昆山廠玻布2座、成都廠玻布1座、蚌埠廠玻布1座，計4座生產線，年產 51千公噸 (+3.1%)
容食廚玻璃	台灣	新竹廠容食廚器玻璃6座生產線，年產 149千公噸 (+9.8%)
汽車玻璃	台灣 大陸	台中廠汽車玻璃生產線，年產 6千公噸 (+4.7%) 鹽城廠汽車玻璃生產線，年產 18千公噸 (+9.0%)
合計		3,070千公噸 (-5.2%)

2023 年銷售

平板玻璃	台灣 大陸 計	銷售量 291千公噸 (-2.7%)，銷售額 4,699百萬元 (+0.4%) 銷售量 2,904千公噸 (+12.0%)，銷售額 29,218百萬元 (+13.2%) 計3,195千公噸，新台幣33,917百萬元 = U$ 1,089mil (+11.2%)，佔集團營業額 70.9%
玻布 / 玻纖	台灣 大陸 計	銷售量 51千公噸 (-18.5%)，銷售額 3,633百萬元 (-18.5%) 銷售量 71千公噸 (-9.6%)，銷售額 4,796百萬元 (-24.2%) 計 122千公噸，新台幣 8,429百萬元 = U$270mil (-21.8%)，佔集團營業額 17.6%
容食廚玻璃	台灣	銷售量 152千公噸(+16.2%)，銷售額 3,828百萬元 = U$123mil (+16.7%)， 佔集團營業額 8.0%
汽車玻璃	台灣 大陸 計	銷售量 7千公噸(+4.1%)，銷售額611百萬元 (+13.7%) 銷售量 18千公噸(+12.2%)，銷售額1,038百萬元 (+48.1%) 計 25千公噸，新台幣 1,649百萬元 = U$ 53mil (+33.2%)，佔集團營業額 3.5%
合計		銷售量3,494千公噸，銷售額新台幣 47,823百萬元 = U$ 1,535mil (+4.4%)， 減合併沖銷後，銷售額新台幣45,619百萬元 = U$ 1,464mil (+4.0%)， 內銷佔87 %，外銷佔 13%

2023 Operation Report

2023 Operation Performance

			2023/2022
Sales Volume		3,493,646 MT	(+9.6%)
Operating Revenue	U$	1,464 mil	(+4%)
Operating Loss	U$	(9) mil	(-62.8%)
Non-operating Income and Expenses	U$	18 mil	(-58.8%)
Income Before Tax	U$	9 mil	(-40.3%)
Net Income After Tax	U$	1 mil	(-103%)
Income After Tax Attributable to Stockholders of the Parent	U$	1 mil	(-104.8%)
Total Equity Attributable to Stockholders	U$	1,549 mil	(-1.8%)
Stock Market Value	U$	1,795 mil	(-10.8%)

Earnings per share：U$0.00, Equity per share: U$0.53
In consideration of planning capital budget for next year, it is proposed not to distribute dividend to stockholders for FY 2023.

2023 Production

Flat Glass	Taiwan China	2 float plants, annual production 291,170MT (-6.1%) 11 float plants, annual production 2,508,270MT (-5.3%)
Fiberglass / Fiberglass Fabric	Taiwan China	1 glass fiber plant, & 1 glass fabric plant, annual production 46,537MT (-35.3%) 4 glass fabric plants, annual production 50,544MT (+3.1%)
Glass Container & Glassware	Taiwan	6 plants, annual production 148,654MT (+9.8%)
Automotive Glass	Taiwan China	TAGC plant, annual production 6,354MT (+4.7%) TYAU plant, annual production 17,990MT (+9.0%)
Group Total		3,069,519MT (-5.2%)

2023 Sales

Flat Glass	Taiwan China Total	Volume 291,200MT (-2.7%), sales revenue U$151mil (+0.4%) Volume 2,903,534MT (+12.0%), sales revenue U$938mil (+13.2%) 3,194,734MT, U$1,089 mil (+11.2%), 70.9% of group sales
Fiberglass / Fiberglass Fabric	Taiwan China Total	Volume 51,188 MT (-18.5%), sales revenue U$116mil (-18.5%) Volume 70,693 MT (-9.6%), sales revenue U$154mil (-24.2%) 121,881MT, U$270 mil (-21.8%), 17.6% of group sales
Glass Container & Glassware	Taiwan	Volume 152,358MT(+16.2%), sales revenue U$123mil (+16.7%), 8.0% of group sales
Automotive Glass	Taiwan China Total	Volume 6,391MT(+4.1%), sales revenue U$20mil (+13.7%) Volume 18,282MT(+12.2%), sales revenue U$33mil (+48.1%) 24,673MT, U$53 mil (+33.2%), 3.5% of group sales
Group Total		3,493,646MT, revenue U$1,535mil (+4.4%)： Net Sales revenue U$1,464mil (+4.0%) domestic market 87% and export 13%

合併財務一覽 Consolidated Financial Scan

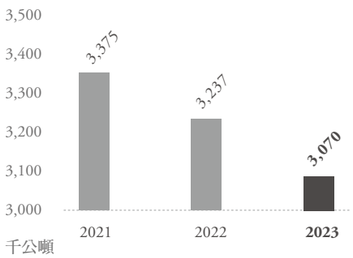
項目 Item	單位 Unit	2022	**2023**	＋%	－%
銷售量 Sales Volume	公噸 MT	3,186,784	**3,493,646**	9.6	
營業收入 Operating Revenue	千元 U$000	43,859,066 1,471,534	**45,619,038** **1,464,261**	4.0	
營業（損失） Operating (Loss)	千元 U$000	(745,877) (25,025)	**(277,282)** **(8,900)**	62.8	
營業外收入及支出 Non-operating Income and Expenses	千元 U$000	1,367,381 45,878	**563,923** **18,100**		58.8
稅前淨利 Income Before Tax	千元 U$000	479,990 16,104	**286,641** **9,200**		40.3
稅後淨（損）利 Net (Loss) Income After Tax	千元 U$000	(822,874) (27,609)	**24,894** **798**	103.0	
稅後淨（損）利歸屬於母公司業主 (Loss)IncomeAfter Tax Attributable to Stockholders of the Parent	千元 U$000	(720,576) (24,176)	**34,594** **1,110**	104.8	
每股純益 Earnings Per Share	元 U$	(0.25) (0.01)	**0.01** **0.00**	104.0	
純益率 Earning Ratio	%	(1.88)	**0.05**	102.7	
每股股利 (現金+股票) Dividend Per Share (Cash+Stock)	元 U$	0 0.0000	**0** **0.0000**		
資產總額 Total Assets	千元 U$000	93,030,018 3,029,307	**90,477,877** **2,946,682**		2.7
實收資本 Capital	千元 U$000	29,080,608 946,943	**29,080,608** **947,097**		
母公司業主權益 Total Equity Attributable to Stockholders of the Parent	千元 U$000	48,438,174 1,577,277	**47,555,057** **1,548,772**		1.8
每股淨值 Equity Per Share	元 U$	16.66 0.54	**16.35** **0.53**		1.9
自有資本率 Shareholders' Equity to Total Assets Ratio	%	52.1	**52.16**	1.0	
合併權益報酬率 Return on Total Equity	%	(1.5)	**0.0**	100.0	
股票市值 Stock Market Value	千元 U$000	61,796,292 2,012,253	**55,107,752** **1,794,748**		10.8
新投資金額 New Capital Expenditure	千元 U$000	4,327,428 145,191	**4,175,421** **134,021**		3.5

合併資產負債表 Consolidated Balance Sheet

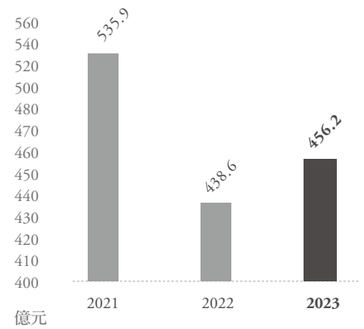
		2022			2023		
		千元	U$000	%	千元	U$000	%
資產 Assets	流動資產 Current Assets	39,881,845	1,298,660	42.9	**37,395,343**	**1,217,891**	**41.3**
	採用權益法之投資 Investments Accounted for Using the Equity Method	6,639,524	216,201	7.1	**7,227,111**	**235,372**	**8.0**
	不動產、廠房及設備 Property, Plant and Equipment	42,343,801	1,378,828	45.5	**41,731,313**	**1,359,105**	**46.1**
	其他非流動資產 Other Noncurrent Assets	4,164,848	135,618	4.5	**4,124,110**	**134,314**	**4.6**
	資產合計 Total Assets	93,030,018	3,029,307	100.0	**90,477,877**	**2,946,682**	**100.0**
負債 Liabilities	流動負債 Current Liabilities	31,285,228	1,018,731	33.6	**27,580,360**	**898,237**	**30.5**
	長期負債 Long-term Loan	8,070,172	262,786	8.7	**10,190,152**	**331,873**	**11.3**
	其他非流動負債 Other Noncurrent Liabilities	2,013,567	65,567	2.2	**1,996,783**	**65,031**	**2.2**
	負債合計 Total Liabilities	41,368,967	1,347,084	44.5	**39,767,295**	**1,295,141**	**44.0**
權益 Equity	母公司業主權益計 Total Equity Attributable to Stockholders of the Parent	48,438,174	1,577,277	52.1	**47,555,057**	**1,548,772**	**52.5**
	實收資本 Capital	29,080,608	946,943		**29,080,608**	**947,097**	
	非控制權益 Non-controlling Interests	3,222,877	104,946	3.4	**3,155,525**	**102,769**	**3.5**
	權益合計 Total Equity	51,661,051	1,682,223	55.5	**50,710,582**	**1,651,541**	**56.0**
負債及權益 Liabilities & Equity		93,030,018	3,029,307	100.0	**90,477,877**	**2,946,682**	**100.0**

歷年財務簡表 Financial Charts by Year

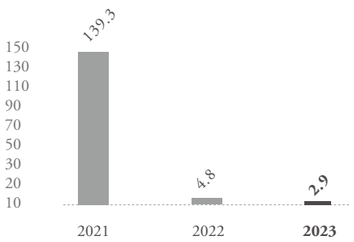
生產量 Capacity



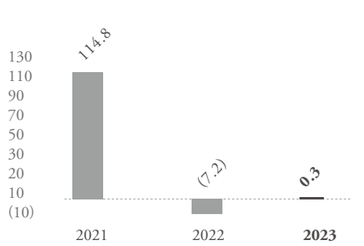
營業收入 Operating Revenue



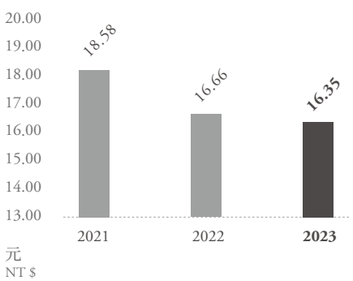
稅前淨利 Income Before Tax



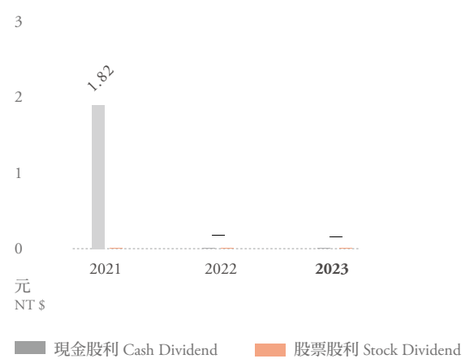
稅後淨利(損)歸屬於母公司業主Income (Loss) After Tax Attributable to Stockholders of the Parent



每股淨值 Equity Per Share



每股股利 Dividend Per Share



董事長致詞

2024 年
展望

各位董事、股東好

2023年在疫情過後，全球供應鏈重組、地緣政治緊張、加上淨零轉型需要龐大投資，複雜的結構性變革，使美國公債殖利率在第四季飆升到金融危機後的新高，進入2024年，通貨膨脹可望下降，以美國為首的全球央行也陸續傳出降息訊息，預估經濟將溫和回升，但短期內仍將面對相對高利率的時代。

大陸商務部於2023年底提前宣布，認定台灣對大陸貿易限制措施構成貿易壁壘，不符合ECFA推動兩岸經濟關係正常化、制度化及自由化的要求，後續可能採取ECFA早收清單539項全面或部分中止，同時對我禁陸2509項實施相應制裁，建議政府提出因應方案；同時，因應歐盟「碳邊境調整機制」(CBAM)、美國清潔競爭法案(CCA)，訂定明確的節能效率目標與優惠費率，以利企業進行自主減碳，並評估對進口商品課徵碳關稅；並應重新思考能源政策，透過投資抵減、融資利息補助、私募股權租稅優惠等政策誘因，提升綠電業者投資建設意願，補助碳補存技術研發與應用，加速實現低碳潔淨能源環境。尤其自四月起全面調漲電價，雖然對工業及民生物價均產生衝擊，但仍建議央行順應全球降息，不應採取升息措施。

綜觀台玻2023年，受制電子產業消化庫存、通膨及匯兌損失等因素，影響整體業績表現，集團2023年合併營收456.2億元，稅後淨利2500萬元，以下就各產品營業內容進行報告:

在平板玻璃方面，因應原物料不斷漲價，各廠持續推行降低成本增加效益方案，及配合政府減碳政策，設置太陽能光電系統計8,700KW，並將廠內能耗效率不佳的老舊設備汰換，導入AI及節能減碳大數據分析，進一步降低生產能耗。鑒於台灣電力結構及電價的調整，公司亦持續研發LOW-E節能玻璃應用，推廣大樓、住宅智慧零碳綠色建築，達到更嚴格建築玻璃外牆帷幕節能標準，降低空調能耗，能有效節省用電支出。

中國大陸市場2023年開始，管理當局取消房地產行業限制措施，為消費者和房地產開發商提供更多支持，並帶動基礎建設讓內需逐漸回溫，市場也看好開放後的各項商機，可望刺激產業經濟。

在纖維事業方面，台玻持續以降低成本，加速研發，增加產品價值為方針。電子級玻纖布面對未來市場需求，針對高速高頻傳輸、AI應用、等需求，供應低介電LOW DK(DK值4.58@10GHz)、二代低介電LOW DK(DK值4.3@10GHz)玻纖布，持續取得國際終端大廠認證採用。FRP與美國歐文斯科寧公司合作，提升產能，降低成本，持續供應客戶更全面及高性能環保產品。

在容食廚品牌方面，增加投標內銷市場各項標案，同時積極取得國外訂單，增加獲利率。

台玻轉投資實聯化工江蘇公司43.99%，2023年純鹼與氯化銨因新增產能及整體庫存變化影響，同業競爭激烈。實聯中控合併營業收入5.3億美元，合併淨利約6千萬美元。

在企業永續經營方面，在全球企業不斷強化ESG投資及改善方針，台玻連續8年榮獲台灣企業永續獎評比企業永續報告獎「傳統製造業銀獎」、TCSA台灣企業永續獎之評比榮獲「單項績效循環經濟領袖獎」、「創新成長領袖獎」、「台灣100大永續典範企業獎」等多項ESG榮譽，並持續關注落實降低產品鏈對於環境及社會所帶來之影響與衝擊，並與供應夥伴共同進步成長，成果顯著有目共睹。

今年為台玻創立六十週年，特別感謝各位股東、董事、獨立董事、全體員工、企業夥伴、經銷商及客戶，一路以來對台玻的支持。過去60年，隨著時代變遷、外在環境改變，競爭與挑戰從未停歇，近年來世界變化之快，尤其是後疫情時代，AI智能化、數據化、無人化科技的應用，加速新世代的到來，除了不斷因應經營環境的變化，創新求變，台玻作為玻璃行業的領導者，在經營管理、環境友善、社會責任，與各層面的利害關係人，在既有的基礎上加快永續轉型、建立低碳營運模式，與時俱進、穩健經營，迎接未來挑戰。

林伯豐
2024.06.07

Chairman's Message

2024
Operation Perspectives

Dear directors and stockholders,

In 2023, after the pandemic, global supply chains underwent restructuring, geopolitical tensions escalated, and there was a significant investment in net-zero transformation and complex structural changes. These factors caused US government bond yields to skyrocket to new highs in the fourth quarter, surpassing post-financial crisis levels. As we move into 2024, inflation is expected to decrease, prompting global central banks, with the Federal Reserve in the United States at the forefront, to gradually announce interest rate cuts. The economy is projected to recover at a moderate pace, although facing a short-term period of relatively high interest rates.

In late 2023, China's Ministry of Commerce pre-announced its finding that Taiwan's trade restrictions on China amounted to a trade barrier. This was seen as contradicting the goals of fostering normalized, institutionalized, and liberalized cross-strait economic relations under the Economic Cooperation Framework Agreement (ECFA). As a result, there could potentially be a complete or partial suspension of the ECFA's early harvest list comprising 539 items, coupled with China imposing corresponding sanctions on 2,509 items prohibited by Taiwan. We advised the government to devise response plans accordingly. Meanwhile, as a response to the EU's Carbon Border Adjustment Mechanism (CBAM) and the US Clean Competition Act (CCA), it is imperative to set clear energy efficiency targets and favorable fee structures. This will aid businesses in independently reducing carbon emissions. Furthermore, evaluations should be conducted concerning the imposition of carbon tariffs on imported goods. It's suggested to reconsider energy policies by boosting incentives for green energy investments. This can be achieved through measures like investment offsets, interest subsidies for financing, and tax incentives for private equity leasing. These steps will encourage green energy firms to invest in infrastructure, promote research and application of carbon capture & storage technology, and hasten the transition to a low-carbon, clean energy environment. Regarding the comprehensive rise in electricity prices beginning in April, it's advisable for the central bank to align with global interest rate reductions and avoid raising interest rates, although it will affect both industrial and consumer prices.

Reviewing Taiwan Glass's performance in 2023, various factors like inventory clearance in the electronics sector, inflation, and exchange rate losses have impacted overall results. The group's consolidated revenue for 2023 amounted to NT$45.62 billion, with a post-tax net profit of NT$25 million. The following is a report detailing the business activities of each product.

In terms of flat glass, as raw material prices continue to climb, our factories are rolling out plans to cut costs and boost efficiency. They're also aligning with government policies on carbon reduction by installing solar photovoltaic systems totaling 8,700KW. Furthermore, they're swapping out outdated, inefficient equipment, utilizing AI and big data analysis for energy and carbon savings, further trimming down production energy usage. With Taiwan's power structure and electricity prices undergoing changes, the Company is also actively developing LOW-E energy-saving glass applications. This effort extends to promoting smart, zero-carbon green buildings in commercial and residential sectors to meet stricter energy-saving standards for building glass curtain walls. This initiative targets reducing air conditioning energy consumption and effectively cutting electricity expenses.

Beginning in 2023, authorities in China have eased restrictions on the real estate industry, offering increased support for consumers and property developers. This initiative has also prompted infrastructure development, leading to a gradual rebound in domestic demand. The market sees promising business opportunities after these changes and expects them to stimulate the industry and economy.

In the fiber business, Taiwan Glass is focused on cost reduction, speeding up R&D and enhancing product value. To meet the future market demands for electronic-grade fiberglass fabric in high-speed, high-frequency transmission, and AI applications, we offer low DK (DK value of 4.58 at 10GHz) and second-generation low DK (DK value of 4.3 at 10GHz) fiberglass fabrics. These products consistently earn certifications from major international end-users. Through collaboration with Owens Corning in FRP, Taiwan Glass is increasing production capacity, lowering costs, and providing customers with comprehensive and high-performance environmentally friendly products.

In the container, tableware, kitchenware and private brand sector, Taiwan Glass is actively pursuing bids for various domestic market projects and securing foreign orders to enhance profit margins.

In terms of Shihlien Chemical Industrial Jiangsu Co., Ltd. (SCJ, 43.99% of its shareholding held by Taiwan Glass) in 2023, the competitive environment for soda ash and ammonium chloride intensified due to increased production capacity and changes in overall inventory. Shihlien China Holding Co., Ltd. reported a consolidated operating income of US$530 million, with a consolidated net profit of around US$60 million.

Regarding sustainable business practices, as global companies enhance their ESG (Environmental, Social, and Governance) investments and policies, Taiwan Glass has consistently earned recognition. It has been awarded the "Silver Award for Traditional Manufacturing Industry" at the Taiwan Corporate Sustainability Awards for eight years running. Furthermore, in the TCSA evaluation, it has garnered accolades such as the "Circular Economy Leader Award," "Innovative Growth Leader Award," and "Taiwan Top 100 Sustainable Exemplary Enterprise Award," among other ESG honors. Taiwan Glass remains committed to reducing environmental and social impacts across its product chain. Collaborating closely with its supply partners, we strive for mutual growth, leading to significant and visible achievements.

This year marks 60th anniversary of Taiwan Glass, and we would like to extend our heartfelt thanks to our stockholders, directors, independent directors, employees, corporate partners, distributors, and customers for their unwavering support throughout the years. Over the past six decades, amid changing times and external landscapes, we've faced continuous competition and challenges. In recent years, especially in the post-pandemic era, rapid global changes and the adoption of AI intelligence, digitization, and unmanned technology have ushered in a new era. Alongside adapting and innovating, as a leader in the glass industry, Taiwan Glass, with all stakeholders, is intensifying sustainable transformation efforts and establishing a low-carbon operational model, building upon our strong foundation. We are committed to keeping abreast of current trends, maintaining steady operations, and addressing future challenges in business management, environmental stewardship, and social responsibility.

Lin, Por Fong
2024.06.07

台灣玻璃工業公司第 21 屆董事 / 第 4 屆審計委員 (2024-2027)

TGI 21th Directors / 4th Audit Committee

董事長 Chairman	林伯豐 Lin, P F Since 1967		
總經理 總裁 President & CEO	林伯實 Lin, P S Since 1967		
駐會董事 Executive Director	林伯淳 Lin, P C Since 1976		
	林瀚東 Lim, H T Since 2009	彭誠浩 Peng, C H Since 2018	徐莉玲 Hsu, L L Since 2015
董事 Directors	林嘉宏 Lin, C H Since 2000	林嘉佑 Lin, C Y Since 2004	林嘉明 Lin, C M Since 2006
	蔡增銘 Tsai, T M Since 2018	連勝武 Lien, S W Since 2021	謝進興 Hsieh,C H Since 2024
獨立董事/審計委員 Independent Directors/ Audit Committe	林聖忠 Lin, S C Since 2021	林瑞岳 Lin, Z Y Since 2021	王瑜哲 Wang, Y C Since 2021

台灣玻璃工業公司第 21 屆董事 / 第 4 屆審計委員 (2024-2027)

TGI 21th Directors / 4th Audit Committee

（數字由左至右 Number from left side to right side）

林伯豐 Lin, P F 前排5 front row 5	林伯實 Lin, P S 前排4 front row 4	林伯淳 Lin, P C 前排6 front row 6		
林瀚東 Lim, H T 前排1 front row 1	彭誠浩 Peng, C H 前排2 front row 2	徐莉玲 Hsu, L L 前排3 front row 3	林嘉宏 Lin, C H 後排4 back row 4	
林嘉佑 Lin, C Y 後排5 back row 5	林嘉明 Lin, C M 後排6 back row 6	蔡增銘 Tsai, T M 後排2 back row 2	連勝武 Lien, S W 後排3 back row 3	謝進興 Hsieh,C H 後排1 back row 1
林聖忠 Lin, S C 前排7 front row 7	林瑞岳 Lin, Z Y 前排8 front row 8	王瑜哲 Wang, Y C 前排9 front row 9		

台灣經營團隊 Taiwan Management Team

董事長 Chairman	林伯豐 Lin, P F
總經理 總裁 President & CEO	林伯實 Lin, P S
駐會董事 Executive Director	林伯淳 Lin, P C
纖維事業部總經理 GM, Fiber	林嘉佑 Lin, C Y
纖維事業部副總 VGM, Fiber	蔡維新 Tsai, W S
鹿港廠副總 VGM, TL	劉敏雄 Liu, M H
桃園廠副總 VGM, TT	陳慶良 Chen, C L
桃園廠廠長 Plant Dir., TT	余哲超 Yu, C C
財務/管理本部總經理 GM, Finance/ Admin	林嘉明 Lin, C M
管理本部副總 VGM, Admin.	洪有欽 Hung, Y C
採購本部副總 VGM, Purchasing	蔡增銘 Tsai, T M

大陸事業部 平板事業部 營運長 COO, China Prod./Flat	林嘉宏 Lin, C H
平板事業部營業副總 VGM, Flat Sales	陳紀瀅 Chen, C Y
彰濱廠副總 VGM,TC	周敬群 Chou, C C
台中廠/平板研發部協理 AGM, TF/Flat Glass R&D	陳國明 Chen, K M
鹿港平板廠協理 AGM, TF-4	石鎮界 Shih, C C
玻璃新材料部副總 VGM, New Glass Materials	趙宏榮 Chao, H J
容食事業部總經理 GM, Container & Glassware	謝進興 Hsieh, C H
新竹廠副總 VGM, TS	吳蔚騰 Wu, W T
容器部內銷協理 AGM,Container Domestic Sales	曹志維 Tsao, C W
容器部外銷協理 AGM,Container Export Sales	吳明德 Wu, M T
新竹廠生產協理 AGM, Prod., TS	沈賢輝 Shen, H H
車板本部總經理 GM, Autoglass	呂宗祥 Lu, T H
車板本部營業部協理 AGM, Autoglass Sales	林信宏 Lin, HH

大陸經營團隊 China Management Team

台灣玻璃中國控股有限公司 TGCH	董事長 Chairman 副董事長 Vice Chairman 董事 Directors	林伯豐 Lin, P F 林伯實 Lin, P S 林伯淳 Lin, P C 林嘉宏 林嘉佑 林嘉明 Lin, C H Lin, C Y Lin, C M
台玻長江玻璃有限公司 CFG	董事長 Chairman 總經理 GM	林嘉宏 Lin, C H 王鳳寶 Wang, F P
台玻成都玻璃有限公司 CDG	董事長 Chairman 總經理 GM	林嘉宏 Lin, C H 姬文剛 李廣玉 Chi, W G Li, K Y
台玻咸陽玻璃有限公司 TXY	董事長 Chairman 總經理 GM	林嘉宏 Lin, C H 張政峰 Chang, C F
台玻安徽玻璃有限公司 TAH	董事長 Chairman 總經理 GM	林嘉宏 Lin, C H 李　虎 Li, H
台玻太倉工程玻璃有限公司 TTAR	董事長 Chairman	林嘉宏 Lin, C H
台玻武漢工程玻璃有限公司 TWAR	董事長 Chairman 總經理 GM	林嘉宏 Lin, C H 李廣玉 Li, K Y

大陸經營團隊 China Management Team

台嘉玻璃纖維有限公司 TGF	董事長 Chairman	林伯豐 Lin, P F		
	纖維事業部總經理 GM, Fiber	林嘉佑 Lin, C Y		
	副總 VGM	王明慶 Wang, M C	營業部副總 VGM, Sales	蔡維新 Tsai, W S
台嘉成都玻纖有限公司 TCD	董事長 Chairman	林伯豐 Lin, P F		
	纖維事業部總經理 GM, Fiber	林嘉佑 Lin, C Y		
	副總 VGM	林雲炎 Lin, Y Y	營業部副總 VGM, Sales	蔡維新 Tsai, W S
台嘉蚌埠玻璃纖維有限公司 TBF	董事長 Chairman	林伯豐 Lin, P F		
	纖維事業部總經理 GM, Fiber	林嘉佑 Lin, C Y		
	總經理 GM	蕭世欽 Hsiao, S C	營業部副總 VGM, Sales	蔡維新 Tsai, W S
台玻青島玻璃有限公司 QFG	董事長 Chairman	林伯實 Lin, P S		
	總經理 GM	宋成紅 Sung, C H		
台玻東海玻璃有限公司 DHG	董事長 Chairman	林伯實 Lin, P S		
	總經理 GM	陳月進 Chen, Y C	副總 VGM	顏和平 Yan, H P
台玻華南玻璃有限公司 HNG	董事長 Chairman	林伯淳 Lin, P C		
	總經理 GM	李天明 Li, T M	鏡板部副總 VGM, Mirror glass	趙成家 Chao, C C
	節能玻璃部鍍膜副總 VGM, LE coating	趙新臣 Chao, H C		
台玻天津玻璃有限公司 TJG	董事長/總經理 Chairman /GM	林伯淳 Lin, P C		
	節能玻璃部副總 VGM, LE glass	趙新臣 Chao, H C	管理部/浮法玻璃部副總 VGM, Admin/Flat	侯琨玉 Hou, K Y

集團產能 Production Capacity

台玻集團各產品總產能
Total Production Capacity of Each Product

產品 Products	台灣 Taiwan		大陸 China		合計 **Total**	
	窯爐座 Furnaces	噸 MT	窯爐座 Furnaces	噸 MT	**窯爐座 Furnaces**	**噸 MT**
浮式平板玻璃 Float Glass	2	340,000	11	2,670,580	**13**	**3,010,580**
玻璃纖維布 Fiberglass Fabric	1	20,000	4	94,000	**5**	**114,000**
玻璃纖維增強絲 Fiberglass Reinforced	1	80,000	-	-	**1**	**80,000**
容、廚器玻璃 Glass Container /Glassware	6	165,400	-	-	**6**	**165,400**
合 計 Total	**10**	**605,400**	**15**	**2,764,580**	**25**	**3,369,980**

台玻集團Low-E線加工產能
Capacity of Low-E Processing Production Lines

產品 Products	台灣 Taiwan		大陸 China		合計 **Total**	
	生產線 Lines	千 M² Thousand M²	生產線 Lines	千 M² Thousand M²	**生產線 Lines**	**千 M² Thousand M²**
低輻射 Low-E 玻璃 Low-E Glass	1	4,000	8	38,000	**9**	**42,000**

台玻集團汽車玻璃加工線產能
Capacity of Automotive Glass Processing Production Lines

產品 Products	台灣 Taiwan		大陸 China		合計 **Total**	
	產線 Lines	千台 Thousand Cars	產線 Lines	千台 Thousand Cars	**產線 Lines**	**千台 Thousand Cars**
汽車玻璃 Automotive Glass	1	300	5	2,800	**6**	**3,100**

產品介紹 Products

平板玻璃

平板玻璃為台玻核心產品，台灣及中國大陸為台玻平板玻璃生產製造的兩大區域。產品行銷台灣、中國、日本、韓國、東南亞、北美、中東、澳 洲、歐洲、南非等世界各地區。

建築用

浮式明板玻璃 / 浮式色板玻璃

浮式明板玻璃表面平滑，波紋少，透視性佳；透過調拌適量高溫色料，成為色板玻璃，可減少輻射熱的穿透，節省能源，增加建築物外觀色彩變化，創造更高價值感受。

壓花玻璃

具有透光不透視之特性，亦可創造各種不同的模糊光影及陰影。

低輻射玻璃 / 低輻射複層玻璃

低輻射玻璃具高可見光透過率及低紅外線透過，隔熱效果極佳，符合環保節能及綠建材、綠建築的需求。低輻射複層玻璃為目前隔熱性能最佳的玻璃，同時也提供良好的隔音性能。台玻生產的低輻射玻璃，輻射率可達最高級的0.02。

反射玻璃

可降低太陽熱能直接穿透量，隔熱性能高，提供室內舒適感，亦能節省能源，並提供建築物多彩和諧的外觀。

減反射玻璃

大幅降低玻璃可見光反射率並提升可見光透過率，可減少建築物外牆玻璃的光汙染，增加展覽空間玻璃的穿透影像清晰度並減少眩光造成的視覺干擾。

強化玻璃/熱浸處理

強度約為普通玻璃的3-5倍，當玻璃遭受外力破壞時會碎裂成豆粒大的顆粒，減少對人體的傷害，增加玻璃使用的安全性；強化玻璃有瞬間破裂的風險，應作熱浸處理(Heat Soak test)，確保使用上更安全。

熱處理增強玻璃

強度為普通玻璃的2倍，波紋較強化玻璃平整，且不易瞬間破裂。

膠合玻璃 / 高性能隔音膠合玻璃

具有安全性、防犯性、阻隔紫外線、防止玻璃碎片飛散等特性，如使用有色膠合膜，可提升建築物外觀的美感，且可減輕熱能進入室內，節省空調能源，增加生活環境舒適度。
台玻開發之高性能隔音膠合玻璃，除上述特點，提供更佳的中高頻的隔音效果，進一步提高隔音能力。

網印漆板玻璃

色澤多樣化，穩定不褪色，可減少太陽熱能進入室內，降低空調費用，經強化處理，安全性高，可替代石材、磁磚，減輕建築物外牆結構負荷，亦可有效降低眩光作用。顏色及圖案能提供客製化，創造建物獨特性及美感。

彎曲玻璃 / 彎曲強化玻璃

增添建築物外觀的變化性，及室內隔間的多變性；經過強化加工後，強度為一般彎曲玻璃的3-5倍，可因應對彎曲造型更大尺寸的要求，視覺品質佳。

銀鏡玻璃

反射影像清晰、精準，背漆可耐酸、耐濕，環保銀鏡運用無銅、鉛製程，避免重金屬污染，符合地球環保潮流。

光電用

優白玻璃

具有比一般透明玻璃更優越的光學性能，更高的可見光及透過率，大量提升太陽熱能和用率，可使用在任何需要高透光及高透視場合或產品，例如太陽能電池BIPV及高級建材需求使用，以因應未來因石油資源枯竭，人類對節能環保及再生能源的需求。

超白光伏玻璃

主要用於晶體矽太陽電池板的蓋板玻璃，具有低含鐵量、高透光率、低光反射率、高平整度、高機械強度、抗風化、抗沖擊等優異特點。

微薄玻璃

台中廠TF5為全新微薄觸控玻璃生產線，全面導入電腦化自動生產管理系統、無塵室及機械手臂收片等設備。2014年11月正式投產,厚度1.1mm、 0.7mm至0.55mm皆已量產，0.33mm也已產出，鋁含量提升至4%，產品經過多重檢驗嚴格把關，媲美日系供應廠商,達到高品質的國際水準，可供應國內外電子大廠生產高品質 之消費性電子產品。

產品介紹 Products

汽車玻璃

台灣汽車玻璃股份有限公司，生產製造各式汽車用前擋風膠合玻璃、天窗、車門窗及後擋風強化玻璃。為台灣主要汽車玻璃供應商，市場佔有率44%；產品通過世界各國汽車零件品質安全認證: 台灣車輛安全審驗中心、歐盟ECE、日本JIS、美國AS及中國CCC，並供應 TOYOTA、FORD、MAZDA、HONDA、NISSAN、HYUNDAI、SUZUKI等國內、外各大汽車製造廠生產線組裝及售後服務零件使用。

玻璃纖維增強絲

玻璃纖維的製造係將熔融狀的玻璃絲急冷固化而得之纖維狀材料。
用途: F.R.P(Fiber Reinforced Plastic)產業，利用玻璃纖維來強化塑膠材料，應用層面包括：船體類、營建類、耐腐蝕工程類、工程塑膠類、運動器材類、電子電器類、運輸工具類、航太軍事類等。 台玻目前玻璃纖維增強絲產品有切股氈(CSM)、併股紗束(CR)、直捲紗束(DR)、編紗束(WR)、切股(CS/O-CS)。玻璃纖維的優異性為耐衝擊強度高、電氣絕緣性佳，是FRP產業中最廣泛使用之材料。

玻璃纖維紗、布

玻璃纖維紗 / 低介電(LDK)玻璃纖維紗

係由慎選合格的原料精密混合，嚴格的生產條件控管，經由高溫溶解抽取而成。生產單纖直徑G(9μm)、E(7μm)、D(5μm)及BC(4μm)全系列玻纖紗，品質精良。除可用於織造電子級玻纖布、低介電玻纖布作為印刷電路板(PCB)原材料外，亦被廣泛使用作為補強材及其他用途。

玻璃纖維布 / 低介電(LDK)玻璃纖維布

使用台玻自製的優質玻纖紗織造成不同厚度之電子級玻纖布和低介電玻纖布，主要供應國內外銅箔基板大廠生產黏結片及高壓成型板材生產印刷電路板。應用範圍包含精密的行動裝置及5G高頻高速資料傳輸，品質符合嚴格標準，並已取得國際終端大廠認證並持續採用。

玻璃器皿

容器

玻璃容器具有絕佳之透明度，且易封蓋及長時間保存內容物風味等優點。此外，玻璃容器亦能漸進加熱至高溫而不變形。且可百分之百的回收再使用之特性，不會破壞地球環境生態，勢必是未來政府環保政策與社會環保意識最為支持的一種包裝材料。為因應市場需求與考量環保因素，台玻致力於輕量瓶(NNPB)吹製技術，製造厚度輕薄均勻、外型美觀的瓶形，年產量超過2億支以上，不僅可減輕客戶的採購成本，並可節省原料與能源，進而促進對環境的保護。容器種類可分為: 狹口瓶、廣口瓶、輕量瓶(NNPB)，色澤可分為透明、茶色、綠色(翡翠綠、古典綠、香檳綠)等色。為提供嬰兒奶瓶市場多樣性的選擇，台玻新開發生產耐熱玻璃奶瓶，瞬間耐熱溫差可達150℃，符合國家CNS標準，提供消費者更具安全保障的高品質奶瓶。

食器

產品分為杯身較薄的吹製杯及杯身較厚、有手把的壓製杯，色澤及白度優並可提供客戶不同顏色的選擇(如: 黑色、鐵灰色、藍色、綠色、紫色等)，品質符合CNS、美國FDA、歐盟REACH及SVHC等多項國際標準。產品種類有水杯、啤酒杯、威士忌杯、馬克杯、密封罐、碗盤等，可搭配印刷、貼花、咬霧、噴砂、噴色等加工處理，讓產品更豐富。

廚器

為膨脹係數α-33之硼矽酸耐熱玻璃，瞬間溫差可達150℃，且耐酸鹼性與強度均較鈉鈣玻璃佳，大幅提升使用安全性及用途多樣化。產品主要為咖啡壺、沖茶器、泡茶壺、儲物罐等，並陸續開發接柄杯及雙層杯等加工產品，提高附加價值。

自有品牌

自有品牌
為朝向生產具有高附加價值的品牌市場，台玻創立自有品牌「TG」，以年輕世代為對象，聘請國際設計大師深澤直人，將對生活的看法融入設計，製作兼具美感與實用性的當代玻璃系列器皿，從台灣出發，行銷全球，TG全系列產品以及TG包裝設計榮獲2021紅點設計大獎雙獎項，於60多國的眾多參賽者中脫穎而出，更於同年度參與日本Good Design設計獎，自5,835件作品中獲得BEST100殊榮。

產品介紹 Products

實聯化工江蘇有限公司

純鹼

純鹼 (Na2Co3) 是重要的化工基本原料之一，廣泛應用於化工、玻璃、冶金、造紙、印染、合成洗滌劑、石油化工、食品、醫藥衛生等工業，使用量大，在國民經濟中佔有重要的地位。

氯化銨

氯化銨 (NH4Cl) 是一種優良的氮肥，廣泛應用於複合肥行業。特別適用於水稻、小麥、棉花、麻類、蔬菜等作物，肥效快、持續時間長、能加速作物光合作用，促進新陳代謝，增根壯莖茂葉,提高作物的抗病蟲害和抗倒狀能力，增加產量。

生技鹽

鹽（氯化鈉）是化學工業的基本原料，廣泛應用於化工、醫藥、食品、飼料、洗劑、日化品、水處理、材料、紡織、染整、特用化學品等方面。鹽是人類和動物生存健康所必需，在生命健康產業中亦有寬廣發展空間。

超純氨

超純氨(NH3)主要應用於新型光電子材料領域，是MOCVD技術製造GaN(氮化鎵)的重要材料，也是氮化矽(Si3N4)的主要原材料，是生產超高級氮的原料氣。

實聯化工江蘇有限公司
SHIHLIEN CHEMICAL INDUSTRIAL JIANGSU CO., LTD.

產品介紹 Products

Flat Glass

Flat glass is the core product of TG. With production plants based in Taiwan and China, flat glass products are sold in Taiwan, China, Japan, Korea, South-East Asia, North America, Middle East, Australia, Europe, South Africa, and other regions of the world.

For ARCHITECTURE

Clear Float Glass / Tinted Float Glass

Clear float glass features smooth and flat surfaces, low distortion, and high transparency. With a prescribed quantity of high-temperature tint agent, it can be turned into tinted float
glass, which reduces solar heat transmission to save energy and offers diverse exterior colors for buildings to create a sense of higher value.

Rolled Glass

Rolled Glass not only provides the function of visual screen but also enables shifts between light and shade.

Low-E Glass / Low-E Insulating Glass

Low-E glass offers high transparency, low infrared transmission and great thermal insulation that meet the demands of energy saving, green buildings and materials.
Low-E insulating glass currently has the best thermal insulation performance, while also provides excellent sound insulation properties. The Low-E glass produced by Taiwan Glass has the highest class emissivity coefficient 0.02.

Reflective Glass

Reflective glass can reduce direct solar thermal penetration, provide high thermal insulation performance, offer indoor comfort, save energy, and create a colorful and harmonious building appearance.

Anti-Reflective Glass

Anti-Reflection Glass significantly reduces the visible light reflectivity of glass and increases the visible light transmittance, which can reduce the light pollution of building exterior glass, increase the glass clarity of penetrating images in exhibition room, and reduce visual interference caused by glare.

Tempered Glass / Heat Soak Test

Tempered glass is 3-5 times stronger than annealed glass. When broken, tempered glass would break into small fragments, which are less likely to cause injury and improves the safety of glass application. It can also withstand sudden changes in temperature. To avoid the spontaneous breakage, tempered glass should undergo heat soak test to improve safety in use.

Heat Strengthened Glass

Heat strengthened glass is 2 times stronger than annealed glass with less distortion, and less likely to occur spontaneous breakage.

Laminated Glass /
Sound Control Laminated Glass

Laminated glass has features of enhanced safety, security, protection from ultraviolet rays, control over transparency levels and shatter-prevention. The color laminated glass can raise the aesthetic appeal of the building, reduce the solar heat transmission to save energy and improve the comfort of living areas. In addition to the features above, sound control laminated glass, developed by TG, provides better sound insulation properties, ranging from medium to high frequency.

Ceramic Spandrel Glass /
Ceramic Silkscreen Glass

Ceramic spandrel and ceramic silkscreen glass provide a variety of stable and durable colors. They can also reduce air-conditioning cost by insulating solar heat. After being tempered to improve safety, spandrel and silkscreen glass can be a substitute for stone and tile to reduce the structural load on the external wall. The printing of the glass can also reduce glare. Various colors and graphics can be custom-made to meet designing needs as well as create particularity of space design.

Bent Glass / Bent Tempered Glass

Buildings glazed with bent glass can have advantages of diversified facade and interior partition. After tempering process, bent tempered glass, which is 3-5 times stronger than ordinary bent glass, can meet the requirements for larger sizes and exceptional optical quality.

產品介紹 Products

Silver Mirror
Mirror glass provides clear and exact reflections. Its back paint resists acid and humidity. Environmentally-friendly silver mirror is produced by copper/lead free process to prevent metal contamination, meeting environmental requirements around the world.

For SOLAR PANEL
Super Clear Glass
Super clear glass has better optical performance with higher visible light and infrared transmittance than ordinary clear glass and greatly enhances solar heat transmittance. Super clear glass can be used for any applications and products that require high transmittance and transparency, i.e. the application of BIPV solar module and advanced construction materials, to respond to the issues of oil resource depletion and the requirements of clean and renewable energy.

Low Iron Photovoltaic Cover Glass
Mainly used as the cover of crystalline silicon solar modules with the advantageous features of low iron content, high transmission, low reflecting rate, high flatness, high mechanical strength, low probability of spontaneous breakage, anti-weathering, high impact resistance and so forth.

Ultra-Thin Glass

The TF5 furnace in Taichung Factory is a newly established production line for electronic grade ultra-thin glass. Introducing the installations of Computerized Automated Production Management System, cleanroom and mechanical arms for collecting glass panes, this line started production in November 2014 with mass production for 1.1mm and 0.7mm glass and production of 0.33mm glass. Aluminum content increased to 4%, all of the products undergo strict inspections before shipment. The high quality product is able to compete with Japanese manufacturers and provide for major electronic manufacturers at home and abroad to produce consumer electronic goods.

Automotive Glass

Taiwan Autoglass Ind. Corp., the main supplier of automotive glass in Taiwan with 44% market share, produces various laminated windshield glass, sunroof glass, side windows, and tempered rear windows. Its glass products not only are awarded the quality and safety certifications around the world, including VSCC in Taiwan, ECE in European Union, JIS in Japan, AS in the U.S., and CCC in China, but also are supplied as Original Equipment and Automotive Glass Replacement for several international car makers, such as TOYOTA, FORD, MAZDA, HONDA, NISSAN, HYUNDAI, and SUZUKI.

Fiberglass Reinforced

Fiberglass reinforced is a fiber-like material manufactured by rapidly cooling melted glass filaments. FRP (fiber reinforced plastic) industry uses fiber glass to reinforce plastic composites, widely applied to the fields including: shipbuilding, construction, corrosion-resistant engineering, engineering plastics, sports/recreation, electronics, transportation, military and aerospace, etc. The products of TG fiberglass reinforced include Chopped Strand Mat (CSM), Conventional Roving (CR), Direct Roving (DR), Woven Roving (WR), and Chopped Strand (CS/O-CS). With outstanding characteristics of high impact strength and excellent electrical insulation properties, fiberglass reinforced is widely used in FRP industry.

Fiberglass Yarn & Fabric

Fiberglass Yarn / Low Dk Fiberglass Yarn
Fiberglass yarn is the product of specific glass composition, melted in high temperature furnaces and drawn into filament under strict production control. TG produces good quality single filament with diameters ranging from G(9 μm), E(7 μm), D(5 μm), to BC(4 μm). Fiberglass yarn can be woven into E-glass fabric and Low Dk fabric for use in printed circuit boards (PCB). It is also widely used for strengthening and reinforcement of composites material.

Fiberglass Fabric / Low Dk Fiberglass Fabric
TG utilizes our own fiberglass yarn to weave a series of E-glass fabric and Low Dk fabric with different thickness, supplying domestic and overseas Copper Clad Laminate (CCL) manufacturers with materials for prepreg and laminate, for use in PCBs. Applications include sophisticated mobile devices, high speed and high frequency data transfer, high performance computing (HPC) / artificial intelligence (AI) devices etc. Meeting high quality standards, TG's products have been certified and continuously adopted by worldwide well-known end users.

產品介紹 Products

Container, Tableware & Kitchenware

Container
Glass containers possess the special advantages of excellent transparency, easy sealing and flavor preservation. Furthermore, glass containers can be heated up gradually without deforming. It is also 100% recyclable and, therefore, environmentally friendly, fully aligned with government's environment protection policy and supported by social environmental consciousness groups.

In light of market demand and environmental concerns, TGI has put emphasis on NNPB technique to produce lightweight glass bottles, consistent wall thickness and good appearance, with production capacity more than 200 million pieces each year. Besides saving cost for customers, lightweight bottles require less raw materials and energy, therefore are more environmentally friendly.

Glass containers are classified by shape: narrow neck bottles, wide mouth jars, lightweight bottles (NNPB) and by color: flint, amber, green (emerald, antique, champagne green), etc..

To provide more choices to the markets, TGI has developed and produced heat-resistant baby feeding bottles, capable of withstanding thermal shock up to 150℃, which meets the requirements of CNS and safety standards of high quality.

Tableware
Tableware glass includes blown-wares with thin walls and press-wares for thicker walls or glasses with handles. With its high transparency and clarity, various colors (ex. black, charcoal, blue, green, purple) are available for clients to choose from. The fine quality of our tableware products have been approved to meet CNS, FDA, ROHS, REACH and SVHC standards. A variety of products including tumblers,beer,glasses,whisky glasses,mugs,canisters,bowls/plates with diverse value-added process such as screen-printing,frosting,sand-blasting and color spraying meet market needs.

Kitchenware
Kitchenware glass is made of α-33 borosilicate material with thermal resistant to 150℃ temperature difference with better alkali and acid-resistance than sodalime glass, enhancing the safety and diversity of products. Product range includes coffee / tea pots, pitchers, jars, etc, and we continue to add value by developing handle-attaching and double-wall glassware.

Private Brand
Toward the brand market of producing high value added products, TGI established its private brand "TG". This brand is young-generation-oriented.
TGI has commissioned Mr. Naoto Fukasawa, who is an international designer, to design products with his perspectives of life, and then TGI manufactures the containers of contemporary glass series, which contains esthetic sensibilities and practicability. Starting from Taiwan, TG will market its private brand around the world. TG Tableware series and TG Packaging had both been awarded the 2021 Red Dot Design Award, standing out among competitors from 60 plus countries around the world; in the same year, TG had also been awarded the Good Design Award, Receiving the Best 100 prize among 5,835 applications.

Soda Ash & Ammonium Chloride

SHIHLIEN CHEMICAL INDUSTRIAL JIANGSU CO., LTD.

Soda Ash
Soda ash (Na_2Co_3) is one of the most important industrial chemicals with widespread applications. It is one of the basic raw materials for glass, for papermaking, dyeing and detergents, and can also be used as flux for metallurgy and softener for water purification.

Ammonium Chloride
Ammonium Chloride (NH4Cl) is mainly used as nitrogenous fertilizer for the complex fertilizer industry. It accelerates photosynthesis and crop metabolism, contributing to plant health and thereby increases crop yield. It is highly suitable for rice, wheat, cotton, hemp and vegetables , with a quick and long-lasting fertilizing effect.

Biotech Salt
Common salt (sodium chloride) is a basic chemical used in many industries, including chemical,pharmaceutical, food, feeds, detergents, toiletries and water treatments materials, textile, dyeing, specialty chemical etc. As common salt is also critical to sustain human and animal life, there is plenty of room for growth in the life and health sectors.

Ultra Pure Ammonia
Ultra-pure ammonia (NH3) is mainly used in the field of novel optoelectronic materials and serves as an important material during GaN (gallium nitride) manufacturing by MOCVD technology. It is also the primary raw material for silicon nitride (Si3N4) and raw gas for the production of ultra-high purity nitrogen.

產品介紹 Products

低輻射玻璃 (Low-E玻璃)

台玻所生產的高性能低輻射(Low-E)玻璃，以真空濺鍍的方式於玻璃表面鍍上多層不同材質鍍膜，藉以達到現代建築玻璃高透光率、高熱阻隔、低反射率等環保節能及綠建築設計需求。

使用Low-E複層玻璃可有效的阻斷熱的三個傳遞路徑(輻射、傳導、對流)，為建築物提供最好的節能減碳效益及最佳的冬暖夏涼環境。

具有同樣可見光透過率的三種玻璃之總熱透過率：

三銀玻璃 ＜ 雙銀玻璃 ＜ 單銀玻璃

三銀低輻射玻璃 (PTE, TTE)

具有世界一流的光熱選擇性，

提供了自然光穿透與太陽熱能控制的最佳比率，節能玻璃的最佳選擇。

雙銀低輻射玻璃 (PDE, TDE)

適合高隔熱性能的需求，

卓越的自然光穿透、太陽熱能阻擋及室外熱能隔絕，

為各種節能玻璃的理想選擇。

單銀低輻射玻璃 (PLE)

提供有效的陽光熱能阻擋，

適合各種建築靈活性設計且具有良好的隔熱水平。

"節能"低輻射玻璃 (JN)

擁有特殊的低輻射隔熱膜層，

暴露於空氣中有極佳的穩定性，可用於單片、複層、膠合等各式玻璃，進一步提升玻璃隔熱性能。

Low-Emissivity Glass (Low-E glass)

The high performance low-emissivity (Low-E) glass produced by Taiwan Glass is coated, by vacuum sputtering, with multi layers of different materials on the glass surface. This product offers high transparency, good thermal insulating, and low light reflectance, the energy-saving properties required by modern architectural glass and green building design. Low-E insulating glass can effectively block three heat transfer paths(radiation, conduction, convection), providing the best energy-saving and carbon-reduction benefits to buildings and indoor comfort all year round.

Total heat transmission comparison of three different Low-E coatings based on same visible light transmittance:

Triple Silver Glass ＜ Double Silver Glass ＜ Single Silver Glass

Triple Silver Low Emissivity Glass (PTE, TTE)

World-class solar thermal selectivity.

Providing the best ratio of natural light transmittance and solar thermal control as the best choice for energy saving glass.

Double silver low-e glass (PDE, TDE)

Suitable for high thermal insulation requirements.

Offering excellent natural light transmittance, solar heat blocking and outdoor thermal isolation as an ideal choice for various energy saving glass.

Single Silver Low Emissivity Glass (PLE)

Effective solar heat blocking.

Suitable for various flexible building designs with good levels of thermal insulation.

"Jie Neng" Low-E glass (JN)

With a special low-emissivity thermal insulation coating layer.

Excellent stability, even exposed to air, to be used for various types of the glass such as single pane, insulating glass, and laminated glass to further improve glass thermal insulation performance.

產品介紹 Products

低輻射複層玻璃 Low-E Insulating Glass

Low-E複層玻璃是由兩片或多片玻璃搭配Low-E鍍膜以一定間隔平行排列組成，四周以鋁間隔條隔出中空層，間隔條中填充高效率3A分子篩來保持中空層的乾燥，玻璃與間隔條以丁基膠黏合，再以高強度結構密封膠封邊而成，具有極佳的阻氣效果及耐候性。

使用台玻高性能Low-E鍍膜及複層結構，讓玻璃可同時阻隔熱的三個傳導路徑(輻射、傳導、對流)，可達到極佳的玻璃隔熱效果，為目前節能效益最佳之玻璃。

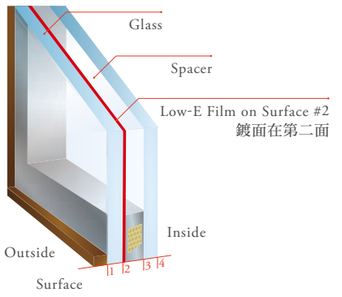
Low-E Insulating Glass

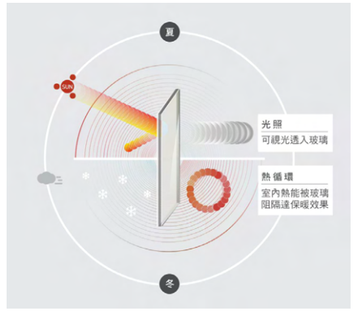
Low-E Insulating Glass consists of two or more parallel sheets of glass, coated with a Low-E layer, separated by set intervals and enclosed with aluminum bars. These bars are filled with high-efficiency 3A molecular sieve to maintain a dry airspace. The glass and aluminum spacers are bonded with butyl and then sealed with high-strength silicone, ensuring an excellent airtight effect and weather resistance.

The use of Taiwan Glass high-performance Low-E coating and insulating structure enables the glass to simultaneously block the three modes of heat transfer: radiation, conduction, and convection. This achieves the best possible thermal insulation effect, making it the most energy-efficient glass currently available.

Low-E玻璃建議搭配複層結構使用，以達最佳效果。

For optimal results, Low-E glass is recommended to be used with insulating units.



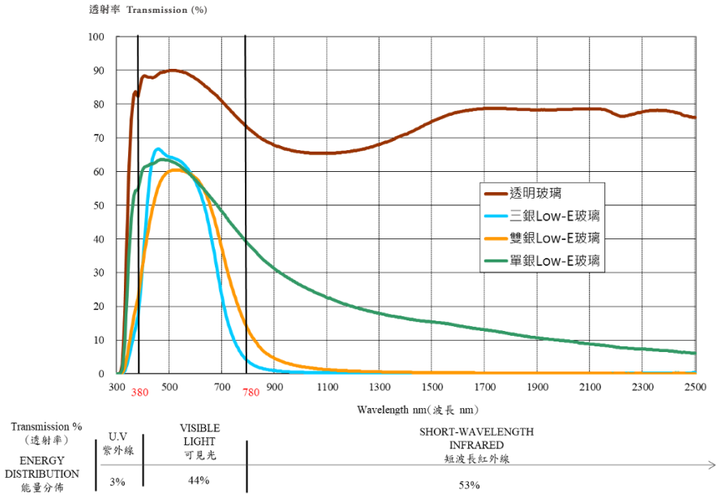


Light
Visible light into glass

Thermal Cycle
Inner heat will be blocked by glass to keep warm

不同鍍膜在太陽光譜中透射率的比較

Spectrum for Different Coating Glass Transmission



產品介紹 Products

TPS玻璃

新一代中空系統

TPS是一種新型的中空玻璃暖邊系統，它是以特殊丁基膠為輔材，填入分子篩的熱塑性隔條。

特性

1. TPS: Thermo Plastic Spacer / 熱塑性隔條
2. TPS熱塑性隔條不含金屬嵌入物
3. 提高玻璃邊緣的熱阻隔性
4. 溫度均勻分布在整個玻璃表面
5. 有效降低凝露的產生
6. 彈性邊緣密封
7. 使玻璃設計變得更為靈活和方便
8. 完美的匹配玻璃裝配行業
9. 高的質量控制＝更長的使用壽命

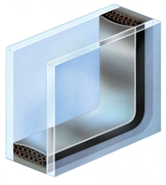
TPS Glass

A New Generation of Insulating System

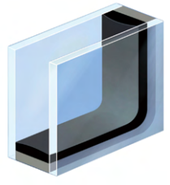
TPS is a new type of IGU Warm Edge System which is made by a special kind of butyl included with integrated desiccant.

Features

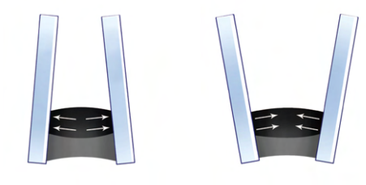
1. TPS: Thermo Plastic Spacer.
2. TPS Thermo Plastic Spacer doesn't have any metal embedded.
3. Improve the thermal insulation of the glass edge.
4. Even temperature throughout the glass surface.
5. Reduce the chance of condensation effectively.
6. Elastic edge seal.
7. Make glass design more flexible and convenient.
8. Perfectly match with glass installation.
9. High quality control to extend IGU durability.



普通型 Conventional IGU
分三部分: 剛性間隔填充分子篩塗布丁基膠
Three parts: fixed spacer filled with desiccant and a special butyl.



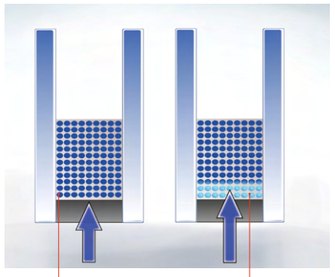
TPS
一個整體: 熱塑性隔條填充分子篩
One single unit: Thermo Plastic Spacer filled with desiccant.



良好的力學性能
Better mechanical performance

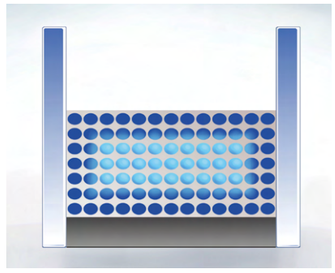
TPS濕氣屏障的原理 The Principles of TPS Moisture Barrier

長久的使用壽命源自最終的水氣屏障
The durability is ultimately determined by the barrier of moisture.



初期水分滲入
Humidity penetration in early stage.

水分滲入後期形成自然屏障
After the penetration, the moist develops a natural barrier.



- 乾燥的分子篩 Dry desiccant
- 半飽和分子篩 Half-saturated desiccant
- 飽和分子篩 Saturated desiccant

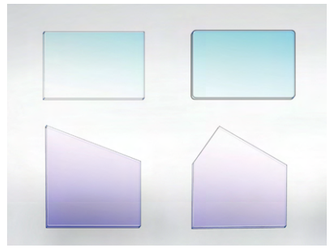
產品介紹 Products

應用領域

1. 住宅建築
2. 商用建築
3. 結構幕牆
4. 高速鐵路
5. 汽車、大型巴士

Applications

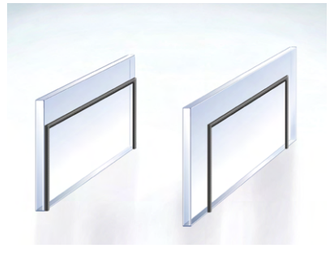
1. Residential building
2. Commercial buildings
3. Structural curtain wall
4. High speed rail
5. Vehicles and buses



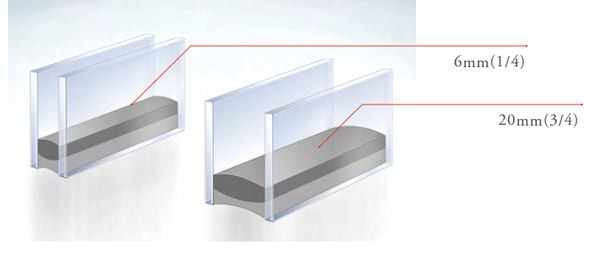
1. 生產形狀靈活多樣
Dynamic and various shapes

2. 鏤空的中空玻璃系統
Hollow-out insulating glass system

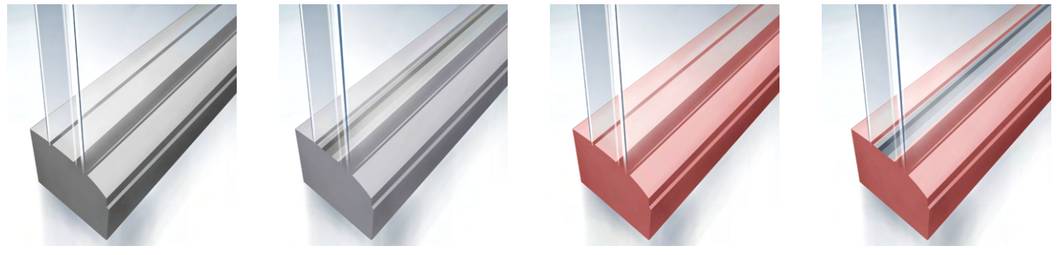
3. 內飾條協調地裝在熱塑性隔條上
Moulding / decoration strip works perfectly with Thermo Plastic Spacer



4. 有邊或無邊的中空玻璃
Insulating glass with or without edge



5. 隔條寬度通常可以在6到20mm的範圍內任意調節
The width of spacer normally can be freely adjusted between 6 and 20mm



6. 在窗框和玻璃之間獲得更好的視覺感官 Better visual effects for the frame and glass

Low-E 玻璃應用 Applications

聯合大於大樓
UDN Group Office and Residential Complex
Low-E(TDE47)膠合複層玻璃

潤泰敦峰
The Silk Court
Low-E(PLE40)膠合複層玻璃

內科之心宏匯瑞光廣場
Honhui Sparkle Square
Low-E(TDE35)複層玻璃

國泰置地廣場
Cathay Landmark
Low-E (TDE44)複層玻璃

Low-E 玻璃應用 Applications

高雄海洋文化及流行音樂中心
Kaohsiung Music Center
Low-E(TDE78)複層玻璃

東京小田原市江之浦測候所
The tip of the Summer Solstice Observation Gallery ©
Odawara Art Foundation

台北南港國家會展中心
Taipei Nangang Exhibition Center
Low-E(TDE78)複層玻璃

中信金控台中金融大樓
CTBC Taichung HQ
Low-E(TTE60A/TSE45)網印複層玻璃

元利信義聯勤
One Park Taipei
Low-E(TDE78)膠合複層玻璃

高雄市立圖書館總館
Kaohsiung Main Public Library
Low-E (TDE60) 複層玻璃

節能實例 Energy Saving Project Case Study

臺北南山廣場 Taipei Nan San Plaza

「臺北南山廣場」辦公大樓，總高272公尺，建物帷幕外牆由台玻協助三菱地所及瀚亞建築師事務所共同設計，外牆面積九成以上均為玻璃結構，並獲得內政部「建物外玻璃熱透過率(THT)值在0.3以下的綠建築節能(鑽石級)標章」及榮獲台灣優良智慧綠建築暨系統產品獎2017 TIBA AWARDS最高榮譽的「鉑金獎」。

1. 採用台玻Low-E節能複層玻璃，中間為12mm的空氣層有效阻隔熱能，相較一般玻璃，可減少45%的冷氣耗電費。
2. 安全性亞洲最強：以最高規格的結構設計，基樁打至岩盤，並裝置兩顆阻尼器，搭配亞洲最強可抗16級風壓的大樓帷幕，減少大樓受高空強風和颱風所造成的搖晃，提供最高等級的安全保障。

The building “Taipei Nan San Plaza” is built with a height of 272 meters. 90% of this building’s external wall is made of glass structure, designed cooperatively by TGI, Mitsubishi Estate and Archasia Design Group. It was awarded as a green building on the merit of external glazing with a coefficient of thermal transmittance (THT) smaller than 0.3 (Diamond Level) for its curtain wall, and was awarded Platinum Award of 2017 TIBA AWARDS – Taiwan Intelligent Green Building and System Product Awards.

1. It adopted TGI’s Low-E energy-saving insulating glass units with a 12mm space, effectively reducing heat and saving 45% of electricity cost for air conditioning compared with common glass.
2. The highest class safety in Asia: designed with the highest-profile structure, this building was piled to bedrock, installed two shock absorbers and the strongest curtain wall in Asia which can resist 16 Bft wind pressure to reduce building shake caused by strong gale and typhoon, providing the highest class safety.

股務記錄 Stock

年 Year	加權指數 Taiex		股價 Stock Price		股利 Dividend	
	High	Low	High	Low	Cash	Stock
1973	514	225	38.60	25.20	1.00	2.00
1974	498	188	35.20	11.30	0.70	1.80
1975	429	190	28.30	13.60	0.70	1.80
1976	417	257	26.95	17.00	2.00	0.84
1977	450	313	27.65	17.30	0.80	1.70
1978	688	447	36.00	24.80	1.24	1.96
1979	659	502	35.40	24.40	2.072	1.428
1980	599	480	32.20	23.30	1.889	1.111
1981	600	502	27.70	20.50	0.50	1.50
1982	546	421	23.00	15.40	0.20	1.10
1983	765	434	38.20	17.10	0.72	1.48
1984	969	764	37.00	30.20	0.60	1.60
1985	840	636	33.10	20.30	–	1.40
1986	1039	839	40.10	31.70	–	1.60
1987	4673	1063	95.00	38.70	–	1.80
1988	8789	2341	125.00	58.50	–	1.80
1989	10773	4873	188.00	78.00	–	2.00
1990	12495	2560	144.00	36.90	–	1.80
1991	6305	3316	71.00	39.70	0.458	1.042
1992	5391	3327	47.50	28.00	0.35	1.00
1993	6070	3135	53.00	29.70	0.35	1.00
1994	7183	5194	65.00	41.70	0.35	1.50
1995	7051	4503	63.50	46.00	0.35	1.50
1996	6982	4690	67.50	47.50	–	1.903
1997	10116	6802	66.50	36.30	0.76	1.09
1998	9277	6251	44.90	30.30	1.35	–
1999	8608	5474	34.80	20.10	1.25	–
2000	10393	4555	39.80	22.00	0.80	0.81
2001	6104	3411	33.20	17.80	1.00	–
2002	6484	3846	29.10	17.60	0.30	0.70
2003	6182	4044	28.60	20.30	0.40	0.80
2004	7135	5255	33.00	24.30	0.50	1.00
2005	6600	5565	31.50	23.70	0.40	0.80
2006	7823	6232	30.40	21.60	0.24	0.96
2007	9859	7306	46.30	25.55	0.40	0.80
2008	9309	3955	41.55	13.30	0.20	0.30
2009	8188	4165	27.70	15.40	0.20	0.30
2010	8990	7072	38.50	24.60	0.60	1.00
2011	9220	6609	53.70	27.10	0.45	0.45
2012	8144	6895	37.30	23.75	0.10	–
2013	8647	7603	35.20	25.70	0.10	–
2014	9569	8264	33.50	21.00	–	–
2015	9973	7410	24.60	10.65	–	–
2016	9430	7627	16.05	11.15	–	–
2017	10854	9273	22.90	12.60	0.50	–
2018	11253	9478	23.60	12.75	0.30	–
2019	12122	10875	12.15	11.20	–	–
2020	14760	8523	19.70	6.46	0.50	–
2021	18291	14720	47.90	15.80	1.82	–
2022	18619	12629	27.00	16.45	–	–
2023	17945	14001	23.70	17.35	–	–
TOTAL	–	–	–	–	26.45	45.67

主要股東(2024-04) Major Shareholders	(%)
台豐投資股份有限公司 Tai Hong Investment Corp.	14.44
合和投資股份有限公司 Ho Ho Investment Corp.	13.84
台建投資股份有限公司 Tai Chien Investment Corp.	8.56
台玉投資股份有限公司 Tai Yu Investment Corp.	8.44
台成投資股份有限公司 Tai Cheng Investment Corp.	7.84
台嘉投資股份有限公司 Tai Chia Investment Corp.	5.42
林建成嘉記股份有限公司 Lim Kien Seng Kah Kih Co. Ltd	4.71
台玻職工退休基金管委會 TGI Retirement Fund.	1.35
S.E.A	0.86
嘉宏股份有限公司 Chia Hung Co.,Ltd.	0.73
Total	66.19

股東總人數 Total Shareholders	80, 824人
總成交量 Transaction Volume	2,425,324,505 股
員工總人數(2024-04) Employees	台灣 4,061人 大陸 7,295人 合計 11,356人

決算日期：2023年12月31日
Fiscal Year Ends on December 31,2023
股東常會：2024年6月7日
General Shareholders' Meeting: June 7,2024
公　告：公開資訊觀測站
Public Notice: http://mops.twse.com.tw/mops/web/index
辦理過戶：台灣玻璃工業公司 股務課
Stock Transfer Registration: TGI Stock Affairs Div.
會計師：安永聯合會計師事務所
C.P.A.: Ernst & Young

集團沿革 Taiwan Glass Group History

1964

1964 公司創立，資本額一億五千萬元
Company established, capital NT$150 million

1965 日本旭硝子株式會社平板玻璃技術合作
Asahi, Japan for Sheet Glass TAA.

新竹廠動土典禮
Hsinchu Factory Groundbreaking

1967 新竹平板廠投產
TS Factory Sheet Glass Plant Production

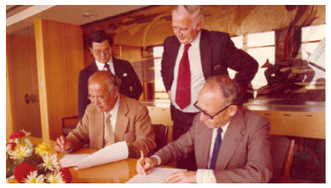
1970

1970 美國WHEATON GLASS 容器玻璃技術合作
Wheaton Glass PLC. USA for Container Glass TAA.

1972 台玻大樓落成
TGI Building inaugurated

1973 台玻股票上市
TGI Stock listed on Taiwan Stock Exchange

1974 英國PILKINGTON PLC. 色板玻璃技術合作
Pilkington PLC. UK for Tinted Glass TAA.



1977 德國VEBA GLASS AG. 食器玻璃技術合作
Veba Glass Ag. Germany for Tableware Glass TAA.

1980

1980 英國PILKINGTON PLC.平板浮法玻璃技術合作
Pilkington PLC. UK for Float Glass TAA.

1983 台中平板浮法廠投產
TF Factory Float Glass Plant Production

1987 美國OWENS CORNING FIBERGLASS CORP. 玻璃纖維技術合作
Owens Corning Fiberglass Corp. USA for Fiberglass Reinforced TAA.

日本柴田株式會社耐熱玻璃技術合作
Sibata Hario, Ltd. Japan for Heat-Resistant Glass TAA.

1988 日本鐘紡株式會社玻璃纖維布技術合作
Kanebo, Ltd. Japan for Fiberglass Fabric Glass TAA.

1989 二十五週年慶 25th Anniversary

1990

1990 桃園玻璃纖維布及玻璃纖維廠投產
TT Factory Fiberglass Fabric & Fiberglass Reinforced Plant Production

1992 創辦人大陸考察
Founder Lin, business visit to China

1993 台灣玻璃中國控股公司創立
Taiwan Glass China Holding Ltd. Established

1994 德國HERMANN HEYE 容器玻璃技術合作
Hermann Heye, Germany for Container Glass TAA.

三十週年慶 30th Anniversary

青島廠建廠 QFG Construction

集團沿革 Taiwan Glass Group History

1995

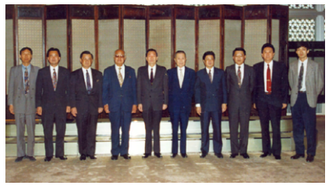
1995

日本石塚硝子株式會社食器玻璃技術合作
Ishizuka Glass Co., Ltd. Japan for Tableware TAA.

台中、桃園、新竹三廠ISO-9002認證通過
TF, TT, TS, Factory ISO-9002 Certification

青島浮法玻璃有限公司投產
Qingdao Float Glass Co., Ltd. Plant Production

創辦人訪問北京 Founder Lin, Beijing visit



1997

台玻長江玻璃有限公司投產
TG Changjiang Glass Co., Ltd. Plant Production

1998

鹿港玻璃纖維布廠投產
TL Factory Fiberglass Fabric Plant Production

2000

台中廠引進雙銀輻射玻璃技術
Taichung Factory Double Low - E Glass Coating Technology

2001

2001

桃園、新竹、台中、鹿港四廠ISO-14001認證通過
TT, TS, TF, TL, Factory ISO-14001 Certification

2002

創辦人榮獲第32屆全球玻璃工業鳳凰獎(美國)
Founder Lin, Awarded with the Phoenix Award (USA)

台玻長江玻璃有限公司CFG-2投產
TG Changjiang Glass Co., Ltd. CFG-2 Plant Production

2004

台嘉玻璃纖維有限公司投產
Taichia Glass Fiber Co., Ltd. Plant Production

台玻東海玻璃有限公司投產
TG Donghai Glass Co., Ltd. Plant Production

台玻成都玻璃有限公司投產
TG Chengdu Glass Co., Ltd. Plant Production

四十週年慶 40th Anniversary

2005

2005

台玻華南玻璃有限公司投產
TG Huanan Glass Co., Ltd. Plant Production

台嘉玻璃纖維有限公司TGF-2投產
Taichia Glass Fiber Co., Ltd. TGF-2 Plant Production

2006

台玻昆山玻璃有限公司CFG-3投產
TG Kunshan Glass Co., Ltd. CFG-3 Plant Production

台玻天津玻璃有限公司投產
TG Tianjin Glass Co., Ltd. Plant Production

鹿港平板廠TF-4投產
TL Factory TF-4 Flat Glass Plant Production

2007

台嘉玻璃纖維有限公司TGF-3投產
Taichia Glass Fiber Co., Ltd. TGF-3 Plant Production

2008

2008

台玻成都玻璃有限公司CDG-2投產
TG Chengdu Glass Co., Ltd. CDG-2 Plant Production

台玻華南玻璃有限公司HNG-2投產
TG Huanan Glass Co., Ltd. HNG-2 Plant Production

台嘉玻璃纖維有限公司TGF-4投產
Taichia Glass Fiber Co., Ltd. TGF-4 Plant Production

新竹廠TS-7壓花窯改建容器窯
Hsinchu Factory TS-7 Rolled Glass Furnace Rebuilding to Container Glass Furnace

2009

桃園廠TT-1擴建FRP
Taoyuan Factory TT-1 Fiberglass Reinforced Furnace Rebuilding & Expansion

彰濱廠引進最新低輻射玻璃鍍膜技術
Changpin Factory New Low-E Glass Coating Technology

台玻福建光伏玻璃有限公司動土
TG Fujian Photovoltaic Glass Co., Ltd. Established & Groundbreaking

集團沿革 Taiwan Glass Group History

2010

2010

台玻悅達汽車玻璃有限公司創立
TG Yueda Autoglass Co., Ltd. Established

台玻太倉工程玻璃有限公司創立及動土
TG Taicang Architectural Glass Co., Ltd.
Established & Groundbreaking

台玻咸陽玻璃有限公司創立
TG Xianyang Glass Co., Ltd. Established

台玻安徽玻璃有限公司創立
TG Anhui Glass Co., Ltd. Established

台玻武漢工程玻璃有限公司創立
TG Wuhan Architectural Glass Co., Ltd. Established

台玻福建光伏玻璃有限公司投產
TG Fujian Photovoltaic Glass Co., Ltd.
Plant Production

2011

2011

彰濱廠投產
Changpin Factory Plant Production

新竹廠ISO-22000認證通過
TS Factory ISO-22000 Certification

台玻悅達太陽能鏡板有限公司創立
TG Yueda Solar Mirror Co., Ltd Established

台嘉成都玻纖有限公司動土
Taichia Chengdu Glass Fiber Co., Ltd.
Groundbreaking

台玻安徽玻璃有限公司動土
TG Anhui Glass Co., Ltd. Groundbreaking

台玻武漢工程玻璃有限公司動土
TG Wuhan Architectural Glass Co., Ltd.
Groundbreaking

台玻悅達汽車玻璃有限公司投產
TG Yueda Autoglass Co., Ltd. Plant
Production

2012

台玻華南玻璃有限公司
低輻射鍍膜玻璃生產線投產
TG Huanan Glass Co., Ltd.
Low-E Glass Production

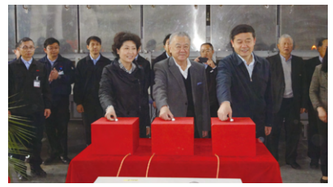
台玻太倉工程玻璃有限公司
低輻射鍍膜玻璃生產線投產
TG Taicang Architectural Glass Co., Ltd.
Low-E Glass Production

台玻武漢工程玻璃有限公司
低輻射鍍膜玻璃生產線投產
TG Wuhan Architectural Glass Co., Ltd.
Low-E Glass Production

2013

2013

台玻咸陽玻璃有限公司烘窯投產
TG Xianyang Glass Co., Ltd. Plant Production



台玻安徽玻璃有限公司烘窯投產
TG Anhui Glass Co., Ltd. Plant Production

新竹廠TS-10耐熱容器窯 / TS-11耐熱食器窯投產
Hsinchu Factory TS-10 / TS-11 Production

台玻東海玻璃有限公司DHG-2投產
TG Donghai Glass Co., Ltd. DHG-2
Plant Production

實聯化工江蘇有限公司投產
Shihlien Chemical Industrial Jiangsu Co., Ltd.
Plant Production

集團沿革 Taiwan Glass Group History

2014

2014

台玻東海玻璃有限公司DHG-3投產
TG Donghai Glass Co., Ltd. DHG-3 Plant Production

台玻集團創業五十週年
50th Anniversary of TG

2015

台嘉成都玻纖有限公司投產
Taichia Chengdu Glass Fiber Co., Ltd. Production

2019

台嘉蚌埠玻璃纖維公司投產
Taichia Bengbu Glass Fiber Co., Ltd. Production

2019

2019

林伯豐董事長榮獲日本政府頒贈「旭日重光章」
Chairman Lin Por-Fong Conferred with The Order of the Rising Sun by the Japanese Government

2020

TG 品牌旗艦店開幕
TG Flagship store opening

2024

台玻集團創業六十週年
60th Anniversary of TG

TAIWAN GLASS GROUP

台玻集團

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