

光伏行业对外贸易企业自律委员会成立，行业加速秩序回归

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投资要点：

- **本周周观点：**本周光伏行业对外贸易企业自律委员会成立，共有 22 家头部光伏企业参与，签署《自律公约》，维护出口秩序保障行业利益，我们认为这是行业共识形成、秩序逐步确立的一个显著标志。产业链价格方面，本周各环节涨跌形式各异，整体持平略有下降，我们认为行业整体正处在出清调整阶段，临近年底集中接单增加价格或将出现波动，但整体下探空间有限，价格底部已经明确，光伏行业正加速回归秩序，当前政策对光伏行业无论是产能还是价格都给出了明确的指引和措施，产业出清、摆脱低价恶性竞争已是大势所趋，价格后面上涨可期，建议重视光伏底部拐点带来的巨大弹性。
- **本周关注组合：**电池硅料（通威股份、钧达股份、协鑫科技），新技术（隆基绿能、爱旭股份、帝尔激光、迈为股份），逆变器（阳光电源、德业股份）。
- **光伏行业对外贸易企业自律委员会成立。**11月22日，天合、晶科、晶澳、隆基、通威、尚德、阿特斯、协鑫集成、TCL 中环、东方日升、正泰、海泰、英利、捷泰、横店东磁、爱旭、华为、阳光电源、锦浪、迈为、捷佳伟创、金辰 22 家国内主营光伏企业自发成立了“光伏行业对外贸易企业自律委员会”，并召开了第一次工作会议，现场宣读并签署了《光伏行业对外贸易企业自律公约》，旨在维护出口秩序，保障行业利益，而非限制措施。商会倡导企业在海外合法合规经营，杜绝不正当竞争行为，力争通过打造《光伏行业出口白名单》、《光伏行业优质出口推荐企业名录》，共同维护中国光伏行业企业品牌的良好国际形象。
- **产业链价格涨跌形势各异 退税调整影响海外硅片价格。**根据 Infolink Consulting 公众号 11 月 27 日最新报价，致密料均价为 39.50 元/kg，环比下降 0.5 元/kg；硅片端，P 型 182/210 硅片均价分别为 1.15、1.70 元/片，环比均持平；N 型 182/210 硅片均价分别为 1.03、1.40 元/片，环比分别持平和下降 0.02 元/片；电池端，PERC 电池 182/210 均价分别为 0.275、0.280 元/W，环比均持平；TOPCON 电池均价 0.28 元/W，环比上涨 0.005 元/W；组件端，双玻 182/210 PERC 组件均价分别为 0.68、0.69 元/W，环比均持平；中国集中式、分布式均价分别为 0.68、0.70 元/W，环比均持平；TOPCon 组件印度、美国、欧洲组件分别为 0.090、0.27、0.095 美元/W，环比分别下降 0.005 美元/W、持平和下降 0.005 美元/W；辅材端，3.2mm/2.0mm 镀膜光伏玻璃均价分别为 19.5、11.5 元/平方米，环比分别下降 1.75 元和下降 1 元。
- **最新一周涨跌幅排名靠前。**我们选取 52 家光伏企业作为样本，光伏板块最近一周涨跌幅 4.44%，跑赢沪深 300 指数 2.39 个百分点，相比 SW 行业分类各板块排名靠前。年初以来光伏板块累计涨跌幅为 0.99%，跑输沪深 300 指数 25.34 个百分点，相比 SW 行业各类板块排名靠后。
- **风险提示。**行业政策波动风险；竞争加剧风险；新技术替代风险；产品价格波动风险。

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1. 光伏产业链价格跟踪

根据 Infolink Consulting 公众号，最新光伏价格更新如下：

多晶硅：致密料均价为 39.50 元/kg，环比下降 0.5 元/kg；

硅片：P 型 182/210 硅片均价分别为 1.15、1.70 元/片，环比均持平；N 型 182/210 硅片均价分别为 1.03、1.40 元/片，环比分别持平和下降 0.02 元/片；

电池：PERC 电池 182/210 均价分别为 0.275、0.280 元/W，环比均持平；TOPCON 电池均价 0.28 元/W，环比上涨 0.005 元/W；

组件：双玻 182/210 PERC 组件均价分别为 0.68、0.69 元/W，环比均持平；中国集中式、分布式均价分别为 0.68、0.70 元/W，环比均持平；TOPCon 组件印度、美国、欧洲组件分别为 0.090、0.27、0.095 美元/W，环比分别下降 0.005 美元/W、持平和下降 0.005 美元/W。

玻璃：3.2mm/2.0mm 镀膜光伏玻璃均价分别为 19.5、11.5 元/平方米，环比分别下降 1.75 元和下降 1 元。

表 1 光伏产业链周度价格（Infolink Consulting —— 2024.11.21-2024.11.27）

	最高价	最低价	均价	涨跌幅(%)	涨跌幅()
多晶硅					
多晶硅致密料（元/kg）	40.0	35.0	39.5	-1.3%	-0.5
硅片					
单晶 P 型硅片-182mm/150μm（元/片）	1.20	1.10	1.15	0.0%	0
单晶 P 型硅片-210mm/150μm（元/片）	1.70	1.65	1.70	0.0%	0
单晶 N 型硅片-182mm/130μm（元/片）	1.03	1.00	1.03	0.0%	0
单晶 N 型硅片-210mm/130μm（元/片）	1.43	1.38	1.40	-1.4%	-0.02
电池片					
单晶 PERC 电池片-182mm/23.1%（元/W）	0.28	0.26	0.275	0.0%	0
单晶 PERC 电池片-210mm/23.1%（元/W）	0.285	0.27	0.28	0.0%	0
TOPCon 电池片-182mm（元/W）	0.28	0.275	0.28	1.8%	0.005
组件					
双面双玻：182 单晶 PERC 组件（元/W）	0.72	0.65	0.68	0.0%	0
双面双玻：210 单晶 PERC 组件（元/W）	0.73	0.67	0.69	0.0%	0
中国项目-集中式项目（元/W）	0.70	0.62	0.68	0.0%	0
中国项目-分布式项目（元/W）	0.73	0.65	0.70	0.0%	0
单晶 PERC 组件-印度本土（\$/W）	0.160	0.140	0.150	-9.1%	-0.015
单晶 TOPCo 组件-印度（\$/W）	0.100	0.080	0.090	-5.3%	-0.005
单晶 PERC 组件-美国（\$/W）	0.270	0.200	0.240	0.0%	0
单晶 TOPCon 组件-美国（\$/W）	0.300	0.220	0.270	0.0%	0
单晶 PERC 组件-欧洲（\$/W）	0.180	0.070	0.085	-5.6%	-0.005
单晶 TOPCon 组件-欧洲（\$/W）	0.105	0.085	0.095	-5.0%	-0.005
组件辅材					
光伏玻璃 3.2mm 镀膜（元/m ² ）	20.0	19.5	19.5	-8.2%	-1.750
光伏玻璃 2.0mm 镀膜（元/m ² ）	12.0	11.5	11.5	-8.0%	-1.000

资料来源：Infolink Consulting 公众号，HTI

根据中国有色金属工业协会硅业分会微信公众号价格统计：本周（截至 2024 年 11 月 28 日，下同）n 型复投料成交价格区间为 3.90-4.30 万元/吨，成交均价为 4.07 万元/吨；n 型颗粒硅成交价格区间维持至 3.60-3.75 万元/吨，成交均价为 3.70 万元/吨。

目前多晶硅市场逐渐有一定的活跃度，临近月底及年底，上下游企业开始集中协商签单，尽管行情较为低迷，但并非完全呈现出僵持不动的局面。据了解，目前绝大多数订单仍在洽谈中，少部分订单让价成交。预计下周可能将有较为集中的成交情况，整体市场恐有跌价预期。

由于本周多晶硅产品价格统计类别有所调整，暂无涨跌幅。目前的库存存量较大，下游需求维持低位。由于各家企业签单策略不同，市场上的成交价格较为混乱，价格尚未达成一致，因此仍有部分企业处于观望或挺价状态。但由于年内各环节排产已趋于明确，行业整体低迷的趋势短期内难以得到根治，反映到硅料环节则体现在低价周期持续时间较长。

截至目前，处于检修或降负荷状态中的企业数量为 14 家。本月内有 1 家企业的四川、云南基地都处于逐步减产状态，1 家企业月内恢复部分产能，但增量较为有限，1 家新投产企业产能持续爬坡。目前西南地区进入枯水期，部分地区电价达到年度高位，成本压力较大。本月大厂各基地开始集中减产，由于包装入库环节与实际产线存在一定的时间差，因此预计下月减产幅度将有更为明显的体现。

表 2 光伏多晶硅周度价格（硅业分会—— 2024.11.21-2024.11.27；万元/吨）

项目	最高价	最低价	均价	波动	波动%
n 型复投料成交价	4.30	3.90	4.07	/	/
n 型致密料成交价	3.70	3.50	3.64	/	/
p 型复投料成交价	/	/	/	/	/
n 型颗粒硅成交价	3.75	3.60	3.70	0.00	0.00%

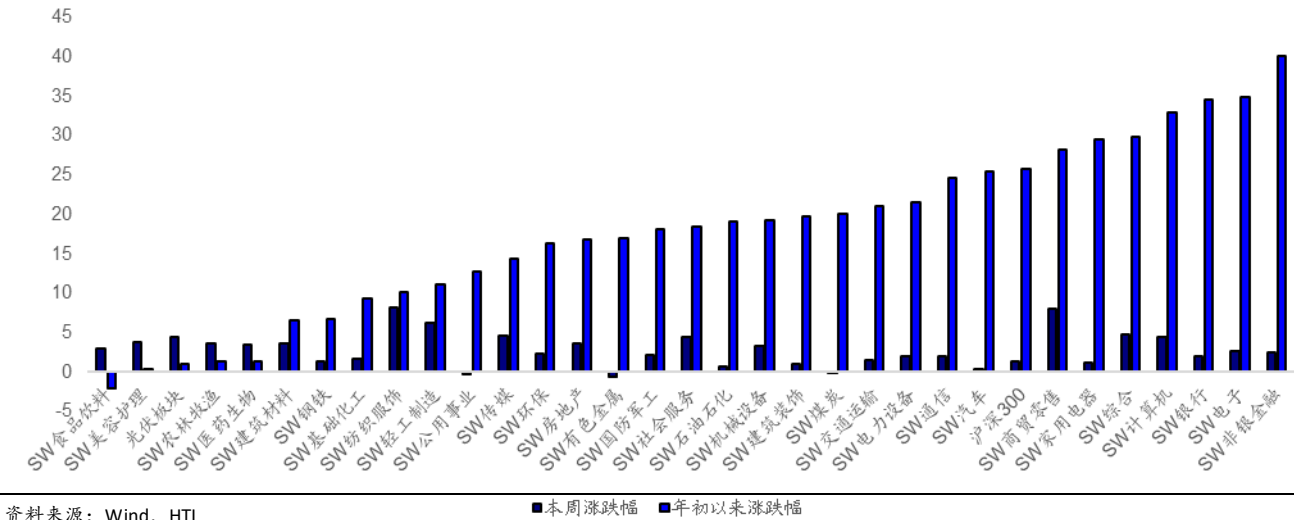
资料来源：中国有色金属工业协会硅业分会微信公众号，安泰科，HTI

2. 板块涨跌幅及估值情况

我们选取 52 家光伏企业作为光伏板块的样本公司，与其他板块做对比。

根据 Wind 数据，光伏板块最近一周涨跌幅 4.44%，跑赢沪深 300 指数 2.39 个百分点，相比 SW 行业分类各板块排名靠前。年初以来光伏板块累计涨跌幅为 0.99%，跑输沪深 300 指数 25.34 个百分点，相比 SW 行业各类板块排名靠后。

图1 各板块最近一周及年初以来涨跌幅对比——总市值加权平均（2024.11.23-2024.11.29；%）

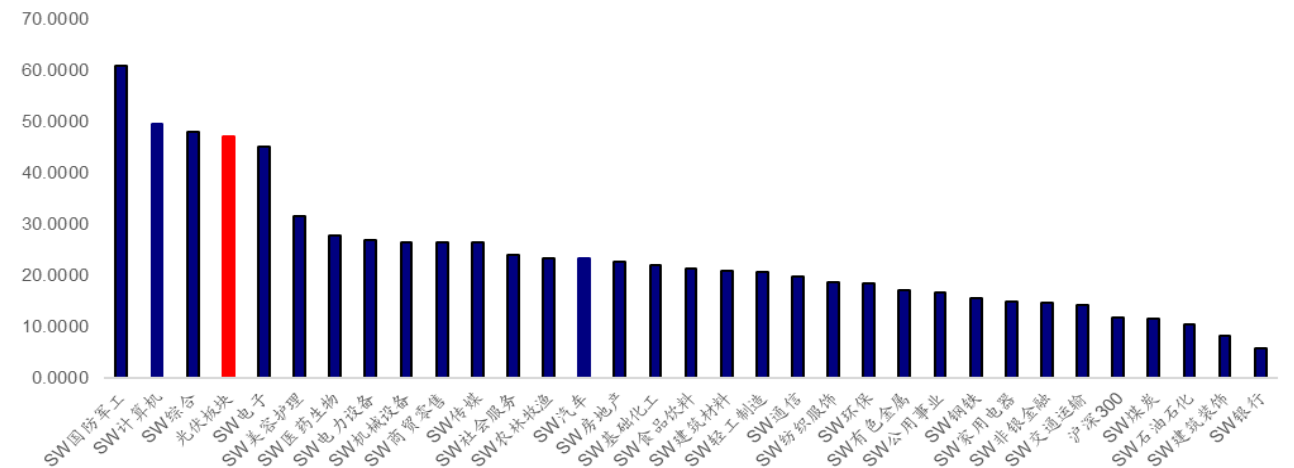


资料来源：Wind, HTI

■本周涨跌幅 ■年初以来涨跌幅

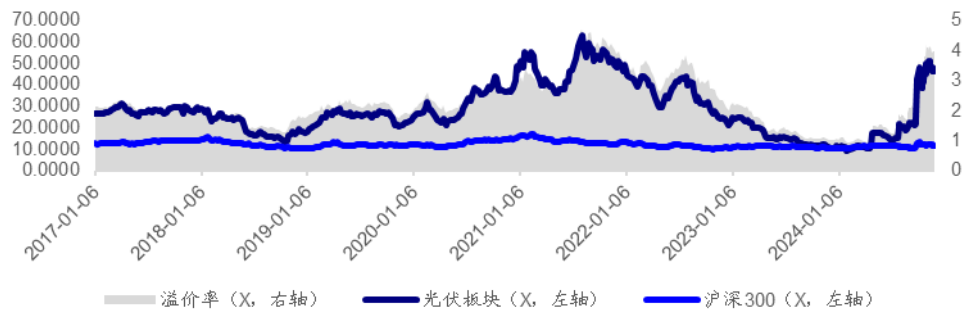
估值方面，光伏板块 2024 年 11 月 29 日的市盈率（TTM，整体法）估值为 47.24 倍，与 SW 行业分类各板块相比，排名靠前。

图2 各板块 2024 年 11 月 29 日的市盈率（TTM，整体法，X）



资料来源：Wind, HTI

从估值变化趋势来看，光伏板块的市盈率（TTM，整体法）估值自 21 年底以来持续下降，今年 9 月开始回升。

图3 光伏板块历史估值及与沪深300对比：市盈率（TTM，整体法，X）


资料来源：Wind, HTI

3. 重点事项

光伏行业对外贸易企业自律委员会成立

11月22日，天合、晶科、晶澳、隆基、通威、尚德、阿特斯、协鑫集成、TCL中环、东方日升、正泰、海泰、英利、捷泰、横店东磁、爱旭、华为、阳光电源、锦浪、迈为、捷佳伟创、金辰22家国内主营光伏企业自发成立了“光伏行业对外贸易企业自律委员会”，并召开了第一次工作会议，现场宣读并签署了《光伏行业对外贸易企业自律公约》，旨在维护出口秩序，保障行业利益，而非限制措施。商会倡导企业在海外合法合规经营，杜绝不正当竞争行为，力争通过打造《光伏行业出口白名单》、《光伏行业优质出口推荐企业名录》，共同维护中国光伏行业企业品牌的良好国际形象。

4. 风险提示

- (1) 行业政策波动风险；
- (2) 竞争加剧风险；
- (3) 新技术替代风险；
- (4) 产品价格波动风险。

APPENDIX 1

Summary

Investment Highlights:

This week, the PV industry established a self-regulatory committee with 22 leading companies signing a charter to maintain export order and industry interests. This marks a consensus and order establishment. Prices across the supply chain varied slightly, with a general slight decline. The industry is in a clearing phase, with year-end orders potentially causing price fluctuations, but the downside is limited. The PV industry is returning to order, with policies providing clear guidance on capacity and pricing. The trend is towards clearing and avoiding low-price competition, with potential price increases. We recommend focusing on the PV bottom turning point for significant elasticity.

This week's focus: Battery silicon materials (Tongwei, Hainan Drinda Automotive Trim, GCL Technology Holdings), new technology (Longi Green Energy Technology, Shanghai Aiko Solar Energy, Wuhan Dr Laser, Suzhou Maxwell Technologies), inverters (Sungrow Power Supply, Ningbo Deye Technology).

The PV industry self-regulatory committee was established on November 22 by 22 major PV companies, including Trina, Jinko, JA Solar, Longi, Tongwei, Suntech, CSI Solar Co., Ltd., GCL System Integration Technology, TCL Zhonghuan Renewable Energy Technology, Risen Energy, Chint, Haitai, Yingli, Jetion, Hengdian Group DMEGC Magnetics, Shanghai Aiko Solar Energy, Huawei, Sungrow Power Supply, Ginlong, Suzhou Maxwell Technologies, Shenzhen S.C New Energy Technology, and Jinchen. They signed a charter to maintain export order and industry interests, promoting legal and compliant overseas operations and avoiding unfair competition. The aim is to maintain a good international image of Chinese PV brands through a whitelist and recommended export companies list.

Price dynamics varied across the supply chain, with tax adjustments affecting overseas silicon wafer prices. According to Infolink Consulting's November 27 report, dense material averaged RMB 39.50/kg, down RMB 0.5/kg. P-type 182/210 silicon wafers averaged RMB 1.15/1.70 per piece, unchanged. N-type 182/210 wafers averaged RMB 1.03/1.40 per piece, unchanged and down RMB 0.02 per piece, respectively. PERC cells 182/210 averaged RMB 0.275/0.280 per W, unchanged. TOPCON cells averaged RMB 0.28 per W, up RMB 0.005 per W. Dual-glass 182/210 PERC modules averaged RMB 0.68/0.69 per W, unchanged. China's centralized and distributed averaged RMB 0.68/0.70 per W, unchanged. TOPCon modules in India, USA, and Europe were USD 0.090/0.27/0.095 per W, down USD 0.005 per W, unchanged, and down USD 0.005 per W, respectively. Auxiliary materials, 3.2mm/2.0mm coated PV glass averaged RMB 19.5/11.5 per square meter, down RMB 1.75 and RMB 1, respectively.

Recent weekly rise and fall rankings: We selected 52 PV companies as samples. The PV sector's recent weekly rise and fall was 4.44%, outperforming the CSI 300 by 2.39 percentage points, ranking high among SW industry sectors. Year-to-date, the PV sector's cumulative rise and fall is 0.99%, underperforming the CSI 300 by 25.34 percentage points, ranking low among SW industry sectors.

Risk Warning: Industry policy fluctuation risk; intensified competition risk; new technology substitution risk; product price fluctuation risk.

附录 APPENDIX

重要信息披露

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中性，未来 12-18 个月内预期相对基准指数变化不大，基准定义如下。根据 FINRA/NYSE 的评级分布规则，我们会将中性评级划入持有这一类别。

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评级分布 Rating Distribution

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Analyst Stock Ratings

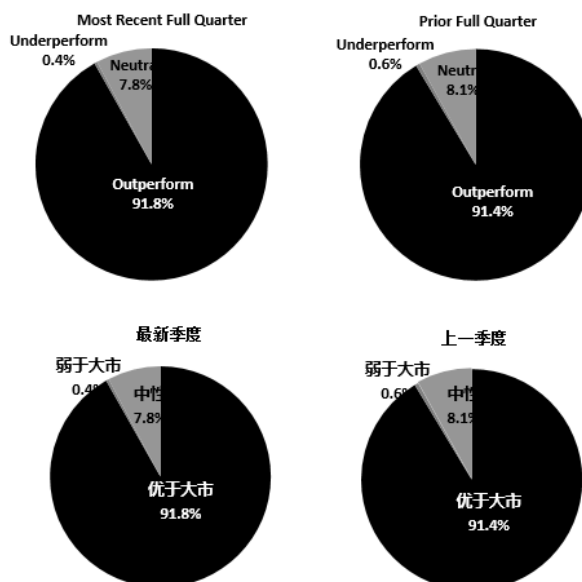
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Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100, US – SP500; for all other China-concept stocks – MSCI China.

Ratings Distribution



截至 2024 年 9 月 30 日海通国际股票研究评级分布

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投资银行客户*	3.5%	4.4%	0.0%

*在每个评级类别里投资银行客户所占的百分比。

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卖出，未来 12-18 个月内预期相对基准指数跌幅在 10%以上，基准定义如下

各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100; 其他所有中国概念股 – MSCI China.

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*Percentage of investment banking clients in each rating category.

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