

## 2023年中期金属投资策略：低库存，供需矛盾一触即发

## 2023 Mid-term Metals Investment Strategy: Low inventory, imminent supply-demand contradiction

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2023年上半年，铜价整体呈现冲高后振荡回落的格局。1月，国内疫情防控政策调整提振铜价。3月美国爆发银行业危机，铜价受挫。4月美国银行业危机持续发酵，欧美经济复苏动能转弱，铜价先扬后抑。5月美联储加息预期攀升、年内降息预期下降，对铜价造成压力。目前铜价小幅下行，市场避险情绪显现。

展望后市，新能源需求持续增长，美联储加息或有望在今年结束，铜价有望上行。

### 2004年至今铜价走势



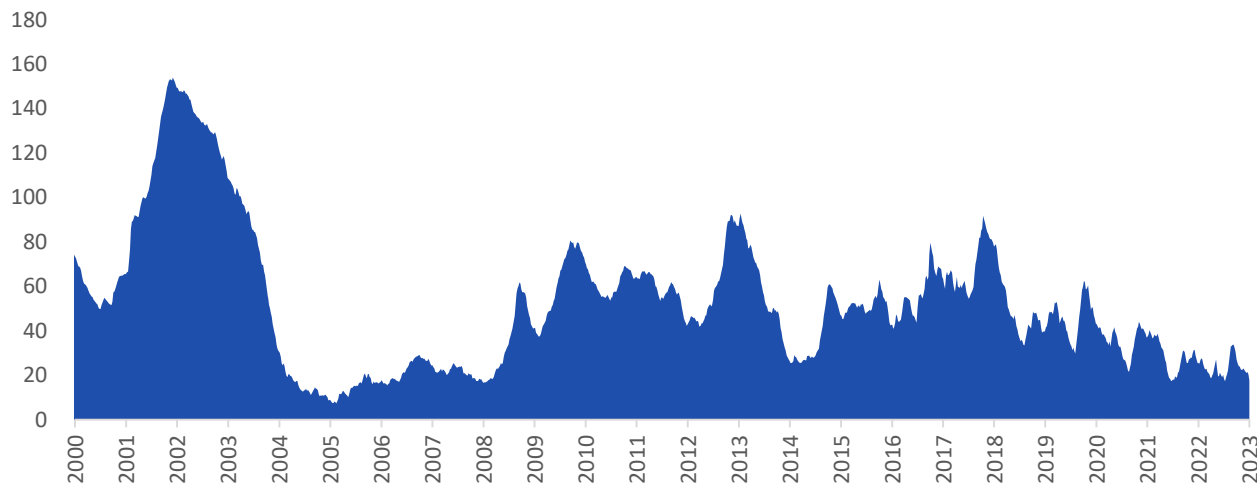
资料来源：Wind，海通国际

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## 铜库存：处于历史低位，给予铜价支撑

近十年来，铜三地合计库存量于2018年3月达到高峰，超过90万吨，于2021年11月跌至最低点17.7万吨左右。从2018年起，总体上看铜库存呈下降趋势。截至2023年6月23日，铜三地总库存量17.46万吨，其中COMEX库存29.52万吨，LME库存8.38万吨，SHFE库存6.04万吨，低库存给予铜价支撑。

LME+COMEX+SHFE铜库存（万吨）

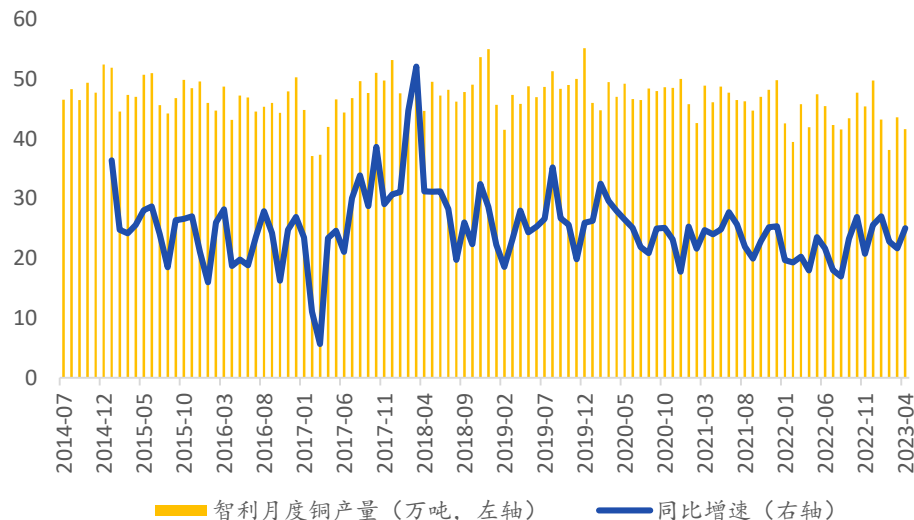


资料来源：Wind，海通国际

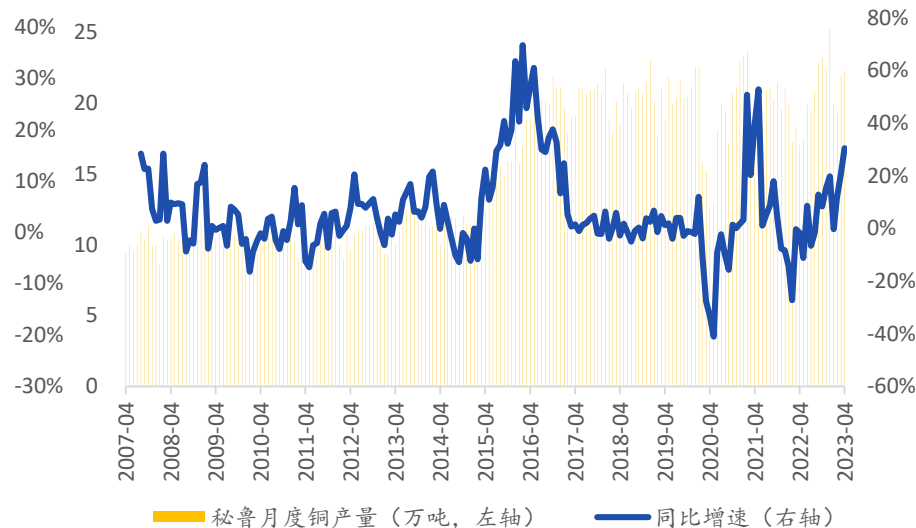
## 铜供给：主要产铜国生产情况

目前智利、秘鲁是全球第一、第二大产铜国。智利1-4月铜产量累计166.5万吨，同比减少1.89%；秘鲁1-4月铜产量累计83.2万吨，同比增加14.95%。据中国有色金属报，2022-2026年，全球铜矿产能预计增加318万吨，CAGR 2.74%，主要来自南美洲的智利和秘鲁，合计增加铜矿产能71万吨，铜冶炼产能基本呈同步增长态势。

智利月度铜产量及同比增速



秘鲁月度铜产量及同比增速



资料来源：智利铜委员会，海通国际

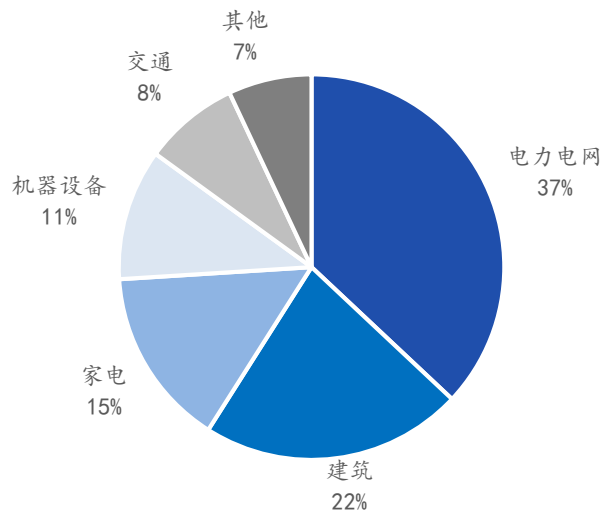
资料来源：全球经济指标（Trading Economics），海通国际

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## 铜需求：电力电网铜需求占比最高，新能源产业是铜需求新增长点

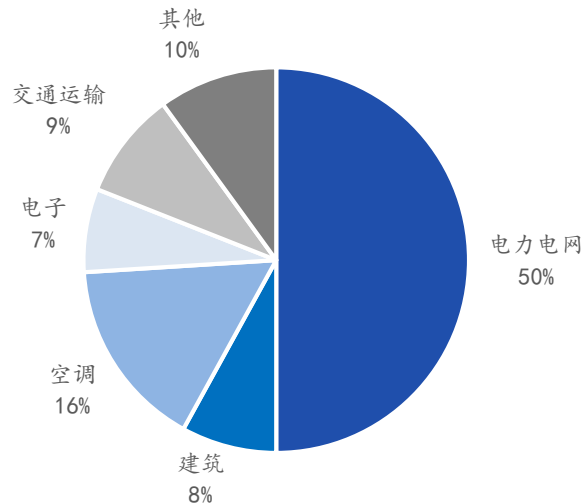
目前，电力电网是铜消费占比最大的领域。传统电网基建投资较为平稳，十四五期间电网投资向电网转型、能源升级、大力发展新能源等方向倾斜。高速铁路、城市轨道交通和电动汽车等基建工程项目，增加用铜需求。光伏和风电等装机需求将在未来持续带来较多铜消费。

2021年全球铜需求结构



资料来源：Bloomberg，海通国际

2021年中国铜需求结构



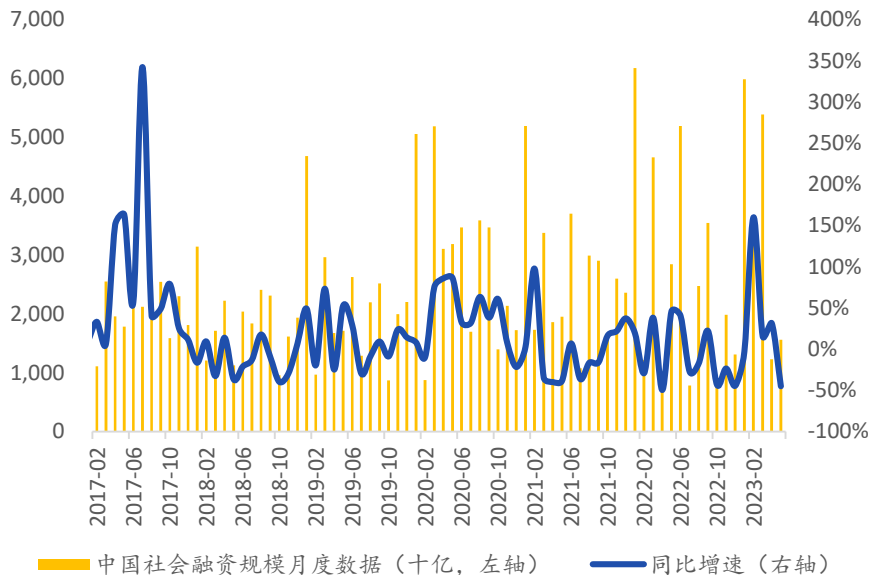
资料来源：Bloomberg，海通国际

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# 铜需求：电网投资额增加，有望带动电力行业铜需求增加

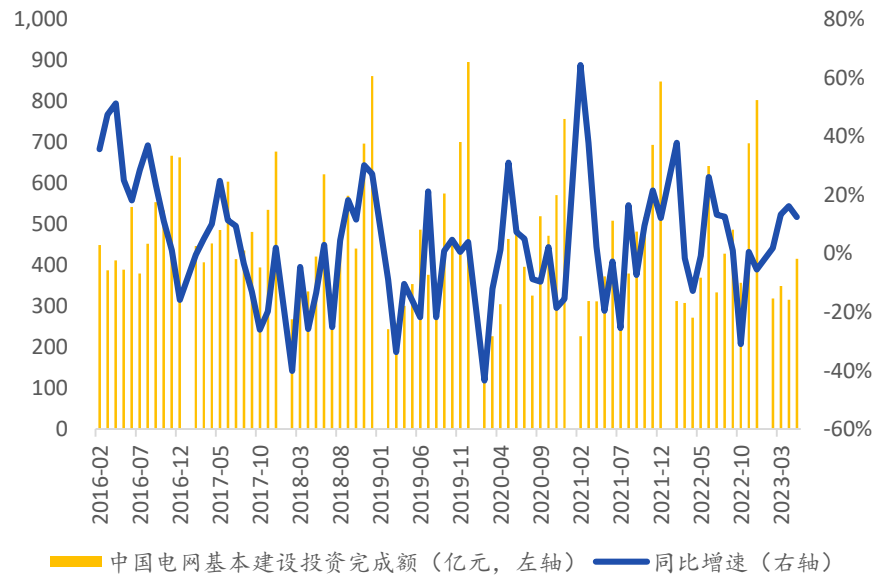
2023年5月中国社会融资规模为15556亿元，同比减少45.25%，环比增加27.05%。2023年5月中国电网基本建设投资额为416亿元，同比增加12.43%，环比增加31.65%。根据前瞻产业研究院数据，电网每投资1亿元，可推动800-1000吨铜消费量。

中国社会融资规模及同比增速



资料来源: Wind, 海通国际

中国电网基本建设投资完成额及同比增速



资料来源: Wind, 海通国际

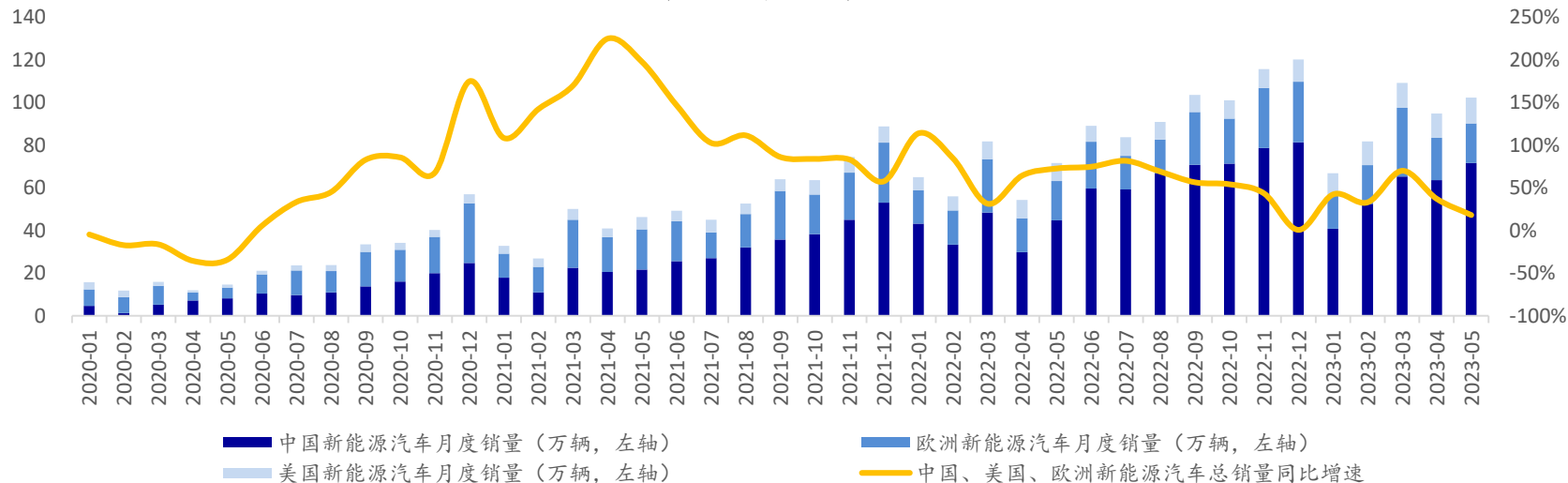
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## 铜需求：新能源汽车发展提升用铜量

中美欧电动车总销量：2023年5月中美欧电动车总计销量约为102.25万辆，同比上升18.17%，环比上升7.80%。中国汽车工业协会数据显示，1-5月中国新能源汽车累计产销量分别为300.5万辆和294万辆，同比分别增长45.1%和46.8%，大面积回暖。据集邦咨询预计，2023年全球新能源汽车销量为1451万辆，同比增长36%。据中汽协预测，2023年的中国新能源汽车销量有望达到900万辆，同比增长35%。

纯电动汽车单车用铜量接近燃油车的4倍，超80kg。4月以来，新能源汽车行业的好转，将进一步恢复和扩大铜需求。

中美欧新能源车销量



资料来源：Wind, InsideEV, Clean technica, 海通国际

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## 铜：各大公司资源储量及规划产量

	权益资源量（万吨）	2023E自产铜（万吨）	2025E自产铜（万吨）
紫金矿业	7372	95	117
洛阳钼业	3207	33	45.3
铜陵有色	1056	11.5	14.1
云南铜业	336	6.3	6.3
西部矿业	625	13.3	15
江西铜业	1343	20	21
五矿资源	771	22	50
中国有色矿业	598	12	13.5
中国黄金国际	681	4.5	8.7

资料来源：公司数据，海通国际

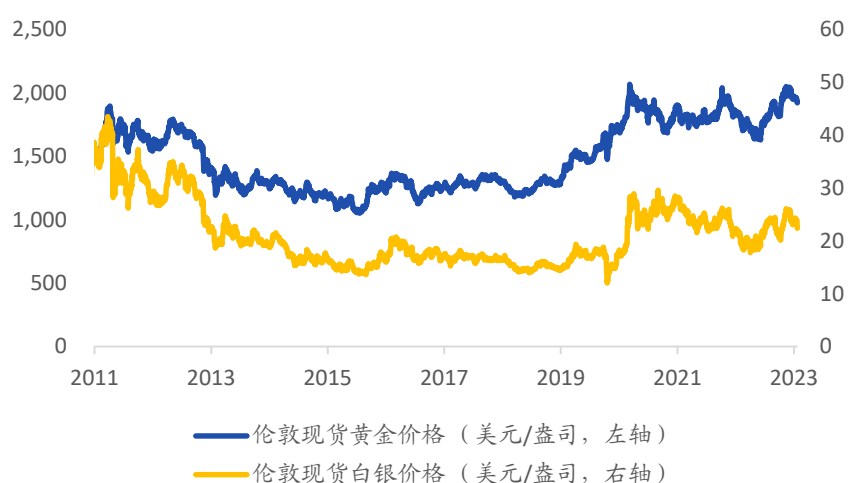
注：产量为海通国际金属团队预测数据。

注：紫金矿业、西部矿业产量为并表口径，其他均为权益口径



2022年11月初以来，由于全球资本市场动荡、美联储放缓加息预期和全球经济衰退预期上升以及各国央行加大黄金购买力度支撑了需求，黄金价格一路上涨。

### 黄金、白银价格走势



资料来源：Wind，海通国际

### 金银比



资料来源：Wind，海通国际

2023年6月14日，美联储6月FOMC会议决定暂停加息，是美联储自2022年3月开启的加息周期以来首次暂停，符合市场主流预期。会上公布的新点阵图显示联储官员认为年内还应当有两次加息，未来议息进程依赖于经济数据。

我们复盘了美元历史加息周期中金铜商品价格表现，发现：加息结束后一年内，黄金大多呈现上涨态势。

美联储加息不同金属的表现情况

加息周期	黄金（美元/盎司）					铜（美元/吨）				
	加息开始月	加息结束月	结束一年后	加息期内涨跌幅	结束后一年涨跌幅	加息开始月	加息结束月	结束一年后	加息期内涨跌幅	结束后一年涨跌幅
1983年3月-1984年8月	414.00	348.25	333.25	-15.88%	-4.31%	---	---	---	---	---
1988年3月-1989年5月	429.30	361.80	363.05	-15.72%	0.35%	2040.90	2570.80	2481.20	25.96%	-3.49%
1994年2月-1995年2月	381.65	376.40	400.65	-1.38%	6.44%	1885.20	2844.00	2514.00	50.86%	-11.60%
1999年6月-2000年5月	266.85	272.25	267.50	2.02%	-1.74%	1420.00	1770.00	1672.00	24.65%	-5.54%
2004年6月-2006年7月	397.20	632.50	665.50	59.24%	5.22%	2816.00	7780.00	7995.00	176.28%	2.76%
2015年12月-2018年12月	1065.40	1281.65	1523.00	20.30%	18.83%	4610.00	5912.00	6169.00	28.24%	4.35%

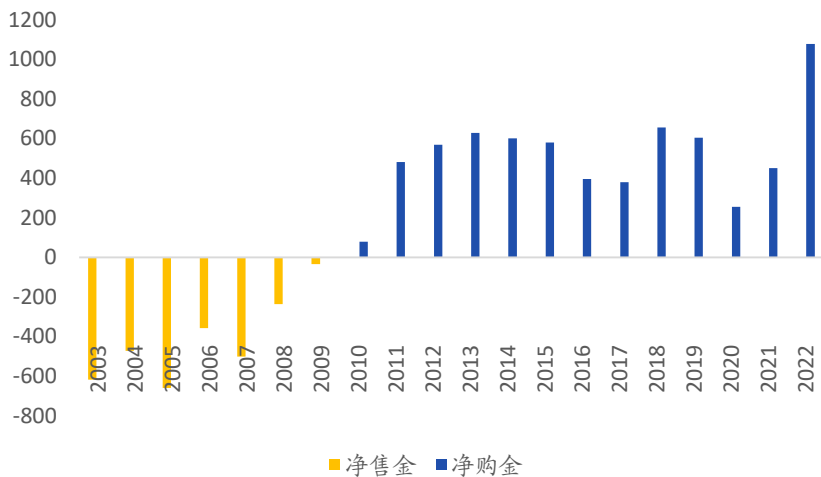
资料来源：Wind，海通国际

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# 贵金属：央行购金需求持续上涨

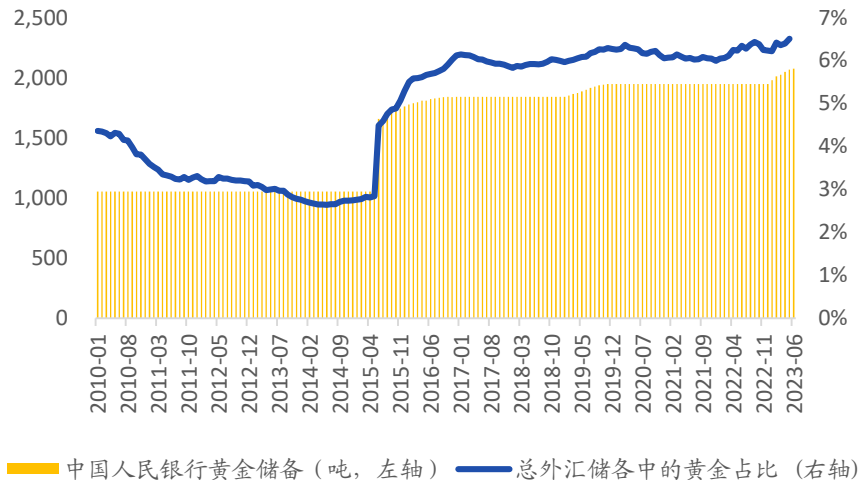
受地缘因素不确定性和全球经济情况影响，各国央行继续大力购买黄金。2022年全球央行购金需求达到1136吨，创下55年以来的新高，且连续第13年净增持黄金储备。

### 全球央行购金量（吨）



资料来源：世界黄金协会，海通国际

### 中国黄金储备及外汇占比



资料来源：中国人民银行，wind，海通国际

# 贵金属：各大公司权益储量和规划产量

黄金公司资源量及产量（吨）

	权益储量/资源量（吨）	2023E产量	2025E产量
紫金矿业	3117	72	90
山东黄金	1319	39.6	56
赤峰黄金	274	13	16
银泰黄金	137	6.8	6.8
招金矿业	954	12	14.8
湖南黄金	137	4	7
中金黄金	384	15.8	16
中国黄金国际	178	6	7.4

资料来源：公司数据，海通国际

注：权益储量是公开信息，底稿保留在海通国际。

注：紫金矿业产量为并表口径，其他均为权益量，均为海通国际金属团队预测数据。

白银公司资源量及产量（吨）

	截至2022年底权益资源量	2022年产量	2023E年产量	2025E产量	备注
紫金矿业	14612	387	390	450	资源量包含伴生矿
盛达资源	3694	203	203	260	资源量包含伴生矿
银泰黄金	5311	151	151	151	-

资料来源：公司公告，海通国际

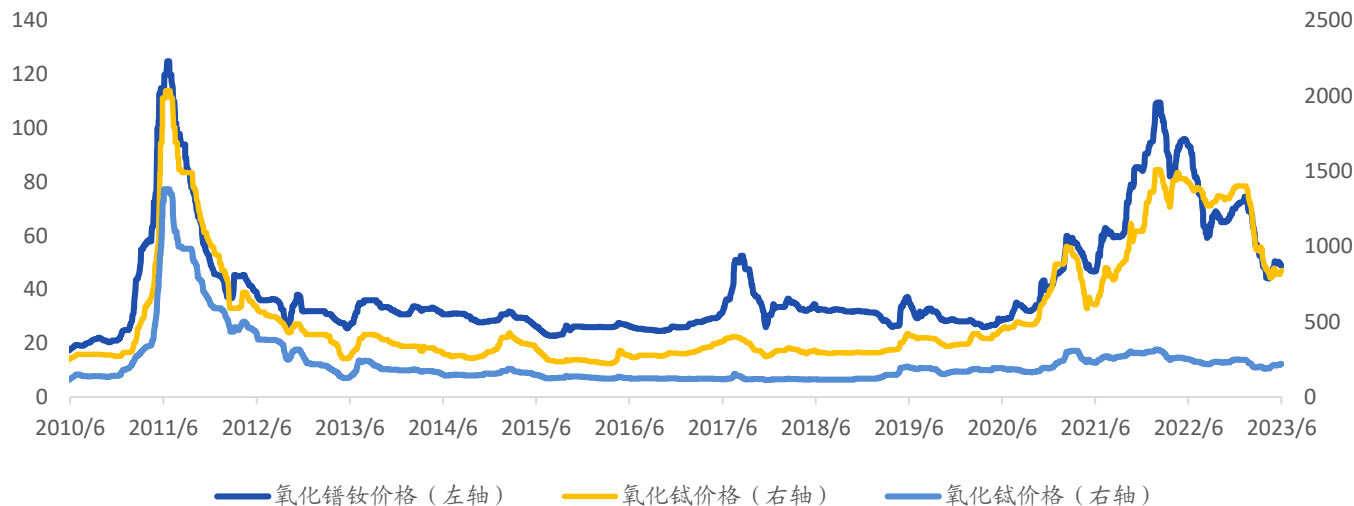
注：紫金矿业产量为并表口径，其他均为权益口径

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## 稀土价格：中枢上行，由政策驱动转为需求推动

自2011年至今，稀土价格总计经历过三次大涨，前两轮为政策收紧与调整带来的价格涨幅，而本轮更多为需求推动。2022年氧化镨钕价格创下十年来新高，近月来价格略有下移，不过总体企稳，全年看，稀土价格中枢上移。

2021年至今主要稀土价格（万元/吨）

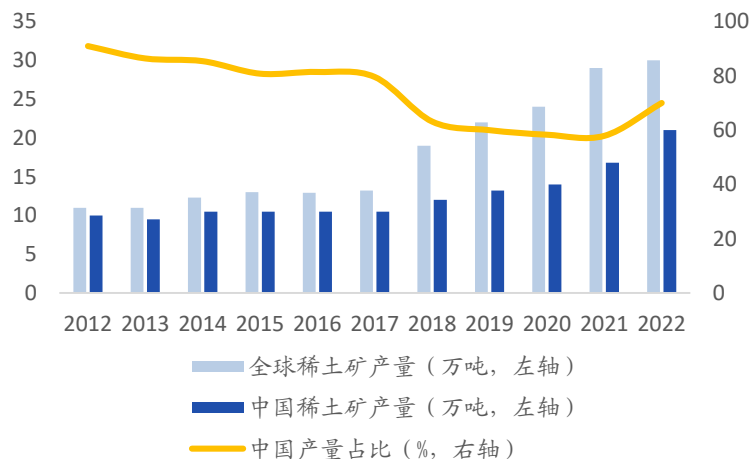


资料来源：亚洲金属网，海通国际

## 稀土供给：中国占全球稀土供给主导地位，未来增量受制于配额

目前全球主要稀土生产国为中国、美国、缅甸和澳大利亚，其中中国在稀土生产方面占据主导地位。从产量方面来看，2022年全球稀土矿产量30万吨，中国产量为21万吨，中国稀土矿产量在全球占比为70.00%。依托得天独厚的资源优势 and 数十年的技术发展，中国已发展成为全球唯一具有完备稀土产业链的国家，分离冶炼环节全球产能占比均达到90%，磁铁合金制造占比超90%，在世界范围内形成了特有的绝对资源优势及产业链优势。

2012-2022年全球及中国稀土矿产量统计



资料来源：共研网，海通国际

2023年第一批四大稀土集团稀土配额

序号	稀土集团	矿产品 (折REO, 吨)		冶炼分离产品 (折REO, 吨)
		岩型稀土 (轻)	离子型稀土 (以中重为主)	
1	中国稀有稀土股份有限公司	28114	7434	33304
2	中国北方稀土 (集团) 高科技股份有限公司	80943		73403
3	厦门钨业股份有限公司		1966	2256
4	广东省稀土产业集团有限公司		1543	6037
	其中：中国有色金属建设股份有限公司			2055
合计		109057	10943	115000
总计		120000		115000

资料来源：工业和信息化部，自然资源部，海通国际

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# 稀土需求：永磁材料成为稀土下游应用的重要增长领域

高性能钕铁硼材料是第三代稀土永磁材料，广泛应用于新能源汽车驱动电机、风力发电机、变频空调压缩机以及消费电子等领域。

全球新能源汽车领域耗稀土量

	2019	2020	2021	2022	2023E	2024E	2025E	2022-2025E, CAGR
全球新增新能源汽车 (百万辆)	2.12	3.16	6.83	10.63	14.21	19.83	27.70	27%
钕铁硼需求量(吨)	6372.00	9483.00	20484.00	31890.00	42633.00	59503.80	83086.44	
氧化镨钕需求量(吨)	2293.92	3413.88	7374.24	11480.40	15347.88	21421.37	29911.12	

资料来源：IEA, 百川盈孚, 中国稀土网, 海通国际

全球风电领域耗稀土量

	2019	2020	2021	2022	2023E	2024E	2025E	2022-2025E, CAGR
全球风电新增装机量(GW)	60.30	93.00	93.50	77.60	118.10	125.50	151.10	18%
直驱电机渗透率	0.35	0.40	0.45	0.50	0.55	0.60	0.60	5%
钕铁硼需求量(吨)	12663.00	22320.00	25245.00	23280.00	38973.00	45180.00	54396.00	24%
氧化镨钕需求量(吨)	4558.68	8035.20	9088.20	8380.80	14030.28	16264.80	19582.56	24%

资料来源：GWEC, 百川盈孚, 北极星, 海通国际

空调领域耗稀土量

	2019	2020	2021	2022	2023E	2024E	2025E	2022-2025E, CAGR
中国变频空调产量(万台)	6940.50	8336.40	10708.00	12626.00	14898.68	17580.44	20744.92	13%
高端变频渗透率	0.40	0.40	0.50	0.60	0.70	0.80	0.90	11%
钕铁硼需求量(吨)	1943.34	2334.19	3747.80	5302.92	7300.35	9845.05	13069.30	25%
氧化镨钕需求量(吨)	699.60	840.31	1349.21	1909.05	2628.13	3544.22	4704.95	25%

资料来源：Wind, 百川盈孚, 海通国际预测

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# 稀土需求：永磁材料成为稀土下游应用的重要增长领域

全球3C领域耗稀土量

	2019	2020	2021	2022	2023E	2024E	2025E	2022-2025E, CAGR
全球手机销量(百万)	1371.1	1280	1359.8	1205.5	1450	1500	1550	6%
全球手机钕铁硼磁材用量(吨)	959.77	896	951.86	843.85	1015	1050	1085	
全球台式机销量(百万)	94	79.8	66	61.3	73.1	72.1	69.6	3%
全球台式机钕铁硼磁材用量(吨)	1175	997.5	825	766.25	913.75	901.25	870	
全球笔记本销量(百万)	173	222.5	275	223.8	260.8	261.6	272.4	5%
全球笔记本钕铁硼磁材用量(吨)	588.2	756.5	935	760.92	886.72	889.44	926.16	
全球平板电脑销量(百万)	145	163.5	158.3	150.8	142.1	142.9	141.5	-2%
全球平板电脑钕铁硼磁材用量(吨)	493	555.9	538.22	512.72	483.14	485.86	481.1	
全球智能音箱销量(百万)	98.1	136.9	180.5	240.9	287.9	332.7	409.4	14%
全球智能音箱钕铁硼磁材用量(吨)	147.15	205.35	270.75	361.35	431.85	499.05	614.1	
全球3C领域钕铁硼磁材用量(吨)	3363.12	3411.25	3520.83	3245.09	3730.46	3825.6	3976.36	5%
氧化镨钕需求(吨)	1210.72	1228.05	1267.50	1168.23	1342.97	1377.22	1431.49	

资料来源：IDC, statista, pubs.acs, 海通国际

氧化镨钕供需平衡表

	2018	2019	2020	2021	2022	2023E
供给	54769.59	57400.92	64017.81	70299.52	84075.18	100890.22
需求	49000.00	57000.00	67437.19	72998.89	84158.12	102984.70
供需平衡(吨)	5769.59	400.92	-3419.38	-2699.37	-82.94	-2094.48
氧化镨钕年均价(万元/吨)	33.20	30.51	31.14	60.04	82.66	-

资料来源：IEA, 百川盈孚, 中国稀土网, GWEC, wind, 北极星, IDC, statista, pubs.acs, 海通国际

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**2022年钕铁硼毛坯产量：**金力永磁1.7万吨，中科三环1.65万吨，正海磁材1.6万吨，宁波韵升1.45万吨。

**2022年单吨毛利：**中科三环10.18万元/吨，金力永磁5.40万元/吨，正海磁材5.58元/吨，宁波韵升7.53万元/吨。

我们认为，未来随着钕铁硼企业大幅扩产，规模、资金、成本、技术、人力等优势会在经营业绩指标上更加凸显。

2022年各磁材公司经营业绩指标

	单位	金力永磁	中科三环	正海磁材	宁波韵升
营业收入	亿元	71.65	97.16	63.19	64.09
其中烧结钕铁硼收入	亿元	60.83	93.51	62.28	54.25
归母净利	亿元	7.03	8.48	4.04	3.56
钕铁硼毛坯产量	吨	17000	16500	16000	14500
钕铁硼毛利率		15.10%	17.97%	14.35%	19.44%
单吨毛利	万元/吨	5.40	10.18	5.58	7.53

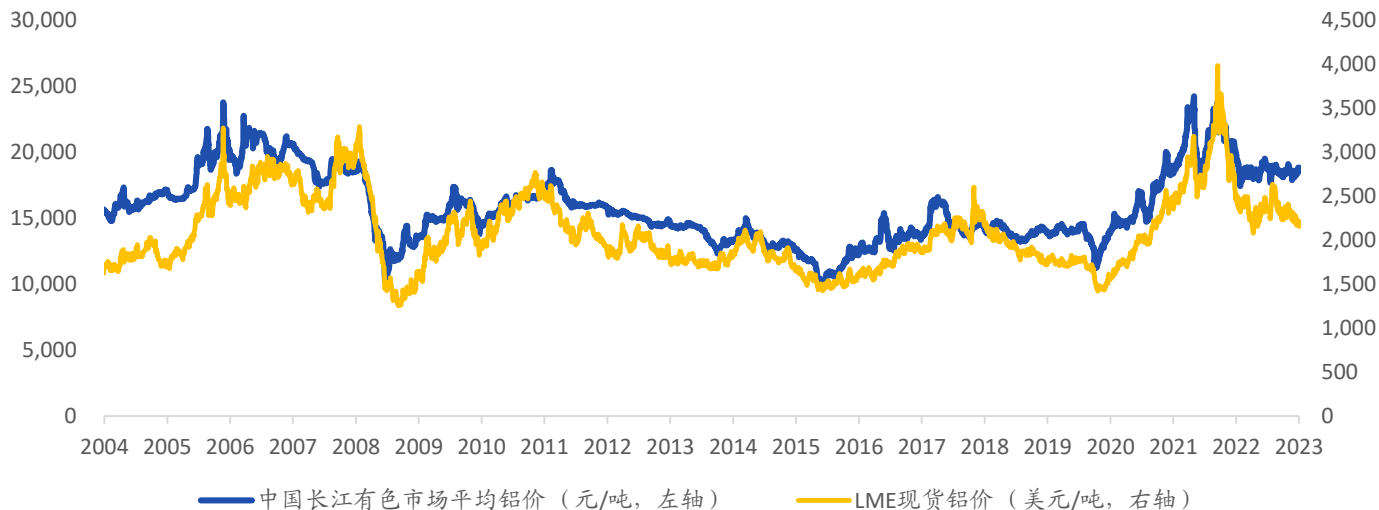
资料来源：公司数据，海通国际

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2023年一季度，在供给端减产、需求端传统淡季以及海外加息加银行危机等因素影响下，铝价区间震荡；二季度，供给端贵州、广西等地区少量增产，六月下旬云南逐步开始复产，需求端进入传统需求旺季，铝价偏强震荡。

未来，伴随经济复苏与新能源汽车、光伏等领域的发展，市场信心恢复，铝价有望迎来上涨。

### 2004年至今铝价走势



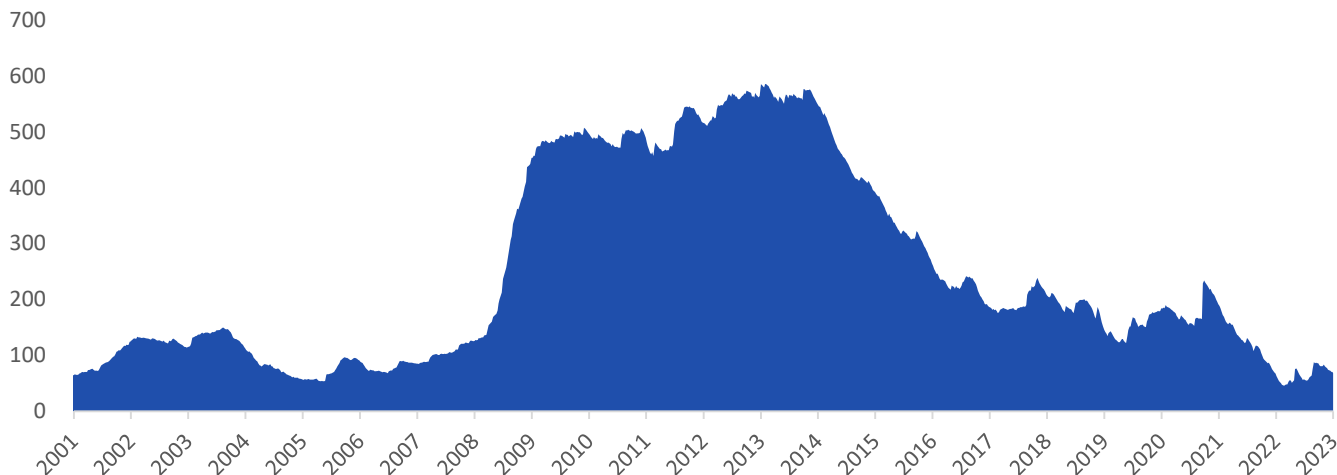
资料来源：Wind，海通国际

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## 铝库存：处于历史低位，给予铝价支撑

近十年来，铝LME+SHFE库存量于2013年7月达到高峰，超585.5万吨，于2022年8月跌至最低点46.5万吨左右。从2014年起，总体上看铝库存呈下降趋势。截至2023年6月23日，LME+SHFE库存量为68.2万吨，其中LME库存53.78万吨，SHFE库存13.11万吨，低库存给予铝价支撑。

LME+SHFE 铝库存（单位：万吨）



资料来源：Wind，海通国际

## 铝供给：云南电解铝复产情况梳理

【云南：自6月17日起，全面放开目前管控的419.4万千瓦负荷管理规模】

云南地区拥有在产11家电解铝企业，电解铝建成总产能近560万吨（包含40万吨待转移产能），指标产能526万吨。2022年云南省内电解铝复产及新增产能释放，全年电解铝产量达420万吨。据国际铝业协会数据，2022年中国电解铝产量4043万吨，全球电解铝产量6846万吨。云南作为中国第四大铝生产省占全国产量的10.4%，占全球产量的6.1%。

据SMM6月15日数据，云南省内电解铝运行规模约326万吨，较去年同期下降150万吨左右。据SMM调研信息，如果云南6、7月水电宽松，月复产规模总量为109万吨，届时云南电解铝运行产能将在435万吨附近，到2023年8月底云南省内或有131万吨的电解铝产能复产，云南省内电解铝运行产能或修复至460万吨左右。但考虑到9月份降雨量或将下降、电解槽启停费用、电力规划等因素，企业在复产节奏上会慎重考虑。综上，预计此次复产总规模或在110-130万吨。

云南电解铝复产调研信息

	建成产能	合计减产产能	预计复产总量
A	305	127.9	82.25
B	90	36.4	21.4
C	35	14.5	7.5
D	106	23.2	20
合计	536	202.0	131.15

资料来源：SMM，海通国际  
注：建成产能以指标量为主

全国待复产产能

省份	变动	备注
云南	0-200	按照去年运行最大值测算
贵州	39	贵州年初减产产能预计在年终逐步复产
四川	5	省内仅剩少量产能待复产，预计年中完成
广西	0	省内基本完成复产

资料来源：SMM，海通国际

## 铝：电解铝公司产能及产量预测

目前电解铝企业产能布局已基本落地，预计未来产能保持稳定。

### 电解铝公司产能及产量预测

	电解铝产能 (万吨)	电解铝权益产能 (万吨)	氧化铝产能 (万吨)	氧化铝权益产能 (万吨)	2023年预计电解铝产量 (万吨)	2024预计电解铝产量 (万吨)
云铝股份	305	264	180	180	255	255
神火股份	170	119	100	36	120	120
中国铝业	495	391	2086	1824	420	435
天山铝业	120	120	250	250	115	115
中国宏桥	646	555	1700	1540	585	590
南山铝业	82.4	82.4	340	245	65	50

资料来源：公司数据，海通国际预测（产能以2022年年报披露为准）

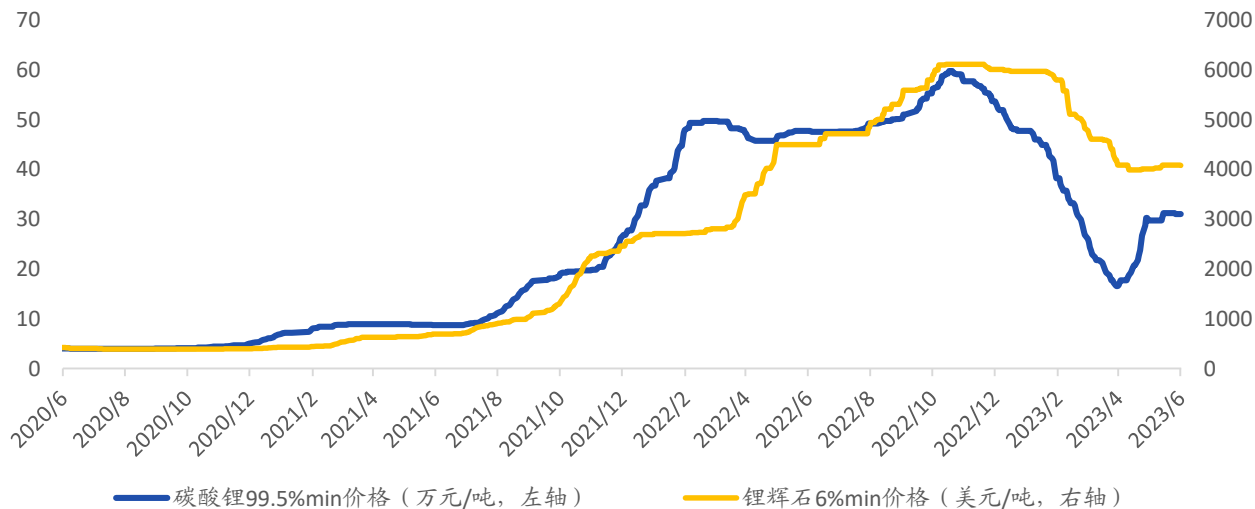
注：中国铝业产能、产量口径均不包含云铝股份。各公司产量预计均为权益口径。

## 锂价格：锂价回调，趋于稳定

2022年碳酸锂价冲高达60万元/吨，至今年4月底，碳酸锂价格一路回落至18万元/吨左右，随后开始止跌回升。据亚洲金属网，截至2023年6月26日，电池级碳酸锂价格为31.05万元/吨，重回30万元/吨。

碳酸锂供需两旺，预计下半年电池级碳酸锂价格或稳定在30万/吨左右。

碳酸锂及锂辉石精矿价格走势



资料来源：亚洲金属网，海通国际

# 锂供给：2019年-2026E 全球锂资源产量梳理（万吨）

	2019	2020	2021	2022	2023E	2024E	2025E	2026E
<b>海外矿山（云母）</b>								
泰利森（格林布什矿）	11.3	7.6	14.2	16.88	17.9	17.9	23.2	24.3
Marion	5.1	6.3	5.3	5.76	6.8	6.9	7	7
Pilgangoora-Pilbara Minerals	2.1	1.2	5	6.46	7.5	8.2	8.7	9.5
Cattlin	2.4	1.4	2.9	1.34	2.1	2.1	2.1	2.1
Wodgina	1	0	0	2.2	3.3	4.5	5.6	6.7
Bald Hill	1.2	0	0	0	0	0	0	0
La conre	0	0	0	0	0	0	0	0
Goulamina	0	0	0	0	0.4	1.7	2.1	3
Mt. Holland	0	0	0	0	0	2.2	3	3.9
Manono	0	0	0	0	0	4.4	8	10
Sonora	0	0	0	0	1.4	1.75	2.8	3.5
Mariana	0	0	0	0	0	1	1	1
Mibra	0.6	1.1	1.1	1.13	1.3	1.4	1.6	1.6
Thacker Pass	0	0	0	0	1.5	1.8	2.1	4.2
Arcadia	0	0	0	0	2	5	5	5
Whabouchi	0	0	0	0	0	0	2.6	3.7
Grota do Cirilo	0	0	0	0	1.7	2.4	2.7	3
Piedmont	0	0	0	0	0.9	1.6	2.4	2.4
<b>国内矿山（云母）</b>								
甲基卡	0	0.4	0.9	0.69	1	2.3	2.3	2.3
李家沟	0	0	0	1.26	1.8	2	2.25	2.25
业隆沟	0	0	0	0.68	1	1	1	1
化山瓷石矿-永兴材料	0	0	0.87	1.97	3	4	5	5
414	0	0	1.25	2	2	2	2	2
<b>海外盐湖</b>								
SQM-Acatama	6.2	7.22	10.84	15.25	16	17.1	18	18
ALB-Acatama	0	4.2	4.4	5.32	6.4	7.2	8	8.4
Cauchari-Olaroz	0	0	0	0	5.5	7	7	7
Olaroz-Orocobre	1.3	1.1	1.1	1.4	2.4	3	3.6	3.6
Livent	2.1	1.95	1.85	2.05	2.2	2.6	3.7	4.8
<b>国内盐湖</b>								
察尔汗盐湖	1.1	1.4	2.4	4.15	4.2	8	10	13
西台吉乃尔	0.6	0.6	0.7	0.9	2	3	3	3
一里坪	0.94	0.94	1.1	1.1	1.1	1.1	1.1	1.1
东台吉乃尔	0.8	0.8	1	1.2	1.5	1.6	1.8	2
扎布耶	0.5	0.5	0.5	0.5	1	2	3	4
<b>合计</b>	<b>37.24</b>	<b>36.71</b>	<b>55.41</b>	<b>72.24</b>	<b>97.90</b>	<b>126.75</b>	<b>151.65</b>	<b>168.35</b>

我们预计2023年全球主要矿山锂供给量为97.90万吨（折碳酸锂当量），较2022年供给量72.24万吨增长25.66万吨，增速为35.52%。

2026年全球主要企业锂供给量约为168.35万吨，23E-26E CAGR为14.51%。

资料来源：公司公告，海通国际整理。

注：各矿山每年产量预测依据公告等公开信息，考虑到锂矿项目实际达产情况可能不及规划预期，我们认为真实供给数字会有所减少。

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## 锂供需平衡：长期需求具有高确定性

预计全球新能源车耗碳酸锂量 (万吨)								
	2019	2020	2021	2022	2023E	2024E	2025E	2026E
全球BEV总计 (百万辆)	1.55	2.17	4.79	7.89	10.37	14.48	20.23	23.25
全球PHEV总计 (百万辆)	0.58	1.00	1.91	2.74	3.82	5.34	7.47	8.58
BEV电池装机量 (kWh/辆)	47.10	45.70	47.00	51.00	58.00	58.00	58.00	58.00
PHEV电池装机量 (kWh/辆)	13.50	14.30	14.90	17.00	20.00	22.00	23.00	24.00
碳酸锂单耗 (吨 LCE/GWh)	650	650	650	650	650	650	650	650
碳酸锂年需求量 BEV (万吨)	4.73	6.43	14.63	26.16	39.08	54.58	76.25	87.64
碳酸锂年需求量 PHEV (万吨)	0.51	0.93	1.85	3.03	4.97	7.64	11.16	13.39
<b>碳酸锂年需求量 (万吨)</b>	<b>5.24</b>	<b>7.36</b>	<b>16.48</b>	<b>29.18</b>	<b>44.05</b>	<b>62.22</b>	<b>87.41</b>	<b>101.03</b>

数据来源：IEA等，海通国际

碳酸锂供需平衡表 (万吨)								
	2019	2020	2021	2022	2023E	2024E	2025E	2026E
供给	37.24	36.71	55.41	72.24	97.90	126.75	151.65	168.35
需求	28.89	34.41	52.42	72.29	95.73	120.90	151.27	167.29
其他领域 (万吨)	17.50	18.00	27.00	31.20	39.00	44.85	48.44	49.41
新能源汽车 (万吨)	5.24	7.36	16.48	29.18	44.05	62.22	87.41	101.03
光伏储能 (万吨)	3.89	4.80	5.38	8.57	9.14	10.08	11.21	12.30
风电储能 (万吨)	2.26	4.25	3.56	3.34	3.54	3.75	4.21	4.55
<b>供需平衡</b>	<b>8.35</b>	<b>2.30</b>	<b>2.99</b>	<b>-0.05</b>	<b>2.17</b>	<b>5.85</b>	<b>0.38</b>	<b>1.06</b>

数据来源：IEA，北极星，蓝思科技，我的钢铁网，海通国际

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# 锂：各大公司权益储量和规划产量

	权益储量/资源量 (万吨, LCE)	2022		2023E		2025E	
		自产	合计	自产	合计	自产	合计
赣锋锂业	4534	3.6	9.7	5.8	12	19.2	27.7
天齐锂业	1442	7.5	8.4	8.1	8.1	10.2	10.2
盐湖股份	1049	1.6	1.6	1.8	1.8	5.5	5.5
藏格矿业	391	1.1	1.1	1.1	1.1	2.4	2.4
华友钴业	260	--	--	2	2	5	5
西藏珠峰	651	--	--	0.3	0.3	1.4	1.4
紫金矿业	1215	--	--	0.3	0.3	12	12
中矿资源	211	0.5	2.3	2.3	2.3	6	6
融捷股份	102	0.7	0.7	0.9	0.9	1.5	1.5
西藏矿业	93	0.5	0.5	0.5	0.5	1.1	1.1
天华新能	0	--	3.4	--	9	--	12
川能动力	59	0.6	0.87	0.9	1	1.1	1.5
雅化集团	69	2.8	2.8	4.5	4.5	16	16
永兴材料	34	1.4	1.4	2.7	2.7	3.5	5
盛新锂能	82	0.7	4.8	1.9	6	3.5	12
ST金圆	19	0.1	0.1	0.3	0.3	0.7	0.7
科达制造	0	--	1.5	--	1.56	--	1.74
合计	10211	21.1	39.2	33.4	54.4	89.1	121.7

资料来源：公司数据，海通国际

注：权益储量是公开信息，底稿保留在海通国际。

注：紫金矿业产量为并表口径，其他均为权益口径，均为海通国际金属团队预测数据。

注：“自产”代表自有矿山开采量，“合计”包括外购矿山产品。

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# 紫金矿业：铜金量价齐升持续扩张，两湖一矿进军新能源板块



公司在中國15个省（區）和海外13个国家拥有重要矿业投资项目。

**境内：**西藏巨龙铜矿、黑龙江多宝山铜矿、福建紫金山铜金矿、新疆阿舍勒铜矿、山西紫金、贵州紫金、陇南紫金等。

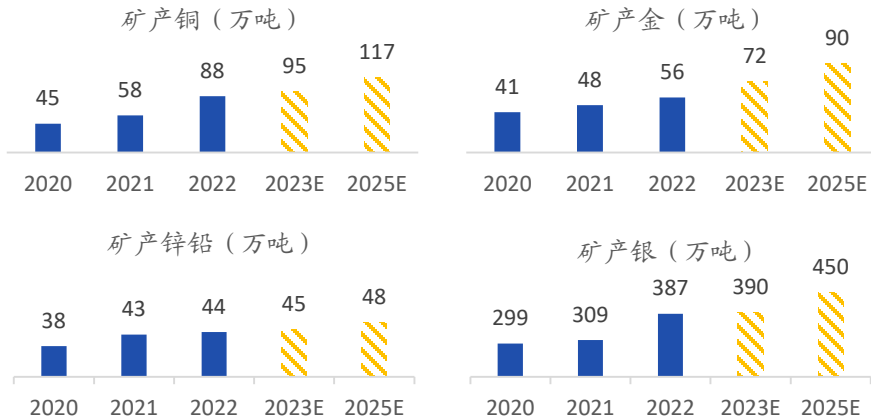
**境外：**塞爾維亞丘卡盧-佩吉銅金礦、塞爾維亞博爾銅礦、剛果（金）卡莫阿銅礦、剛果（金）科盧韋齊銅礦、哥倫比亞武里蒂卡金礦等。

2020-2022年，公司銅產量大幅提升，**銅產量**從37萬噸增至 86 萬噸，進入全球上市銅企前6位；**礦產金**從 41 噸增至 56 噸，進位至全球上市金企第 9 位；**碳酸鋰當量資源量**將超過 1000 萬噸，遠景規劃年產能將突破 15 萬噸碳酸鋰當量，均將進入全球前 10、國內前 3。

資料來源：紫金礦業2022年報，海通國際

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# 紫金矿业：铜金量价齐升持续扩张，两湖一矿进军新能源板块



矿产品2022年产量2023-2025年产量规划

	2022	2023E	2025E
矿产铜 (万吨)	88	95	117
矿产金 (万吨)	56	72	90
矿产锌铅 (万吨)	44	45	48
矿产银 (万吨)	387	390	450
碳酸锂 (万吨)	-	0.3	12
矿产钼 (万吨)	0.4	0.6	1.6

资料来源：紫金矿业2022年报，海通国际

注：2022年矿产铜产量含公司持有艾芬豪矿业13.59%股权部分所对应权益

铜/Cu



实施西藏巨龙铜矿二期项目，2025年总体将形成矿产铜35万吨/年产能

刚果（金）卡莫阿铜矿三期500万吨/年选厂及配套50万吨铜冶炼厂项目计划2024年10月建成投产，达产后预期产能提升至矿产铜62万吨/年，有望晋升为全球第四大铜矿

实施塞尔维亚丘卡卢-佩吉铜金矿下部矿带及博尔铜矿技改扩建项目，2025年总体形成矿产铜30万吨/年产能，有望晋升为欧洲第二大铜生产企业

锂/Li



“两湖一矿”锂项目计划2023年底一期工程基本建成投产，并启动二期工程，达成后碳酸锂总产能达12-15万吨

西藏拉果错盐湖一期、二期项目全部建成达产后，预期形成4-5万吨/年氢氧化锂产能

湖南湘源硬岩锂多金属矿预期可形成4-5万吨/年当量碳酸锂产能

阿根廷3Q锂盐湖一期、二期项目全部建成达产后，预期形成4-6万吨/年碳酸锂产能

金/Au



苏里南罗斯贝尔金矿改扩建工程建成达产后，预期形成矿产金10吨/年产能

山西紫金智能化采选改扩建项目计划2023年第二季度建成，年新增矿产金3-4吨

巴新波格拉金矿项目预计2023年复产

海域金矿项目建成达产后预期产量约15-20吨/年，有望晋升为中国最大黄金矿山，公司持有海域金矿实际权益约44%（含招金矿业20%权益）

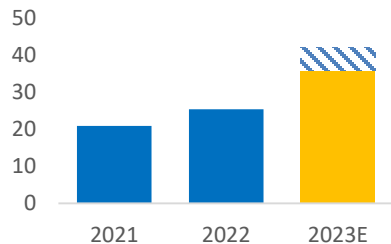
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## 洛阳钼业：在建项目顺利进行，铜钴产量实现倍增

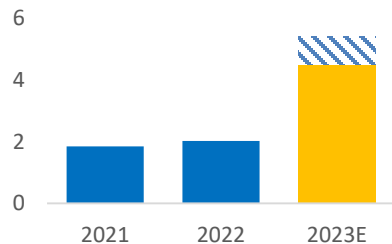
2023年，公司铜产量指引约42万吨，钴产量指引约5万吨，将成为全球领先的铜生产商和最大钴生产商。

其中，TFM铜29-33万吨，KFM铜7-9万吨，NPM铜2.4-2.7万吨；TFM钴2.1-2.4万吨，KFM钴2.4-3万吨。

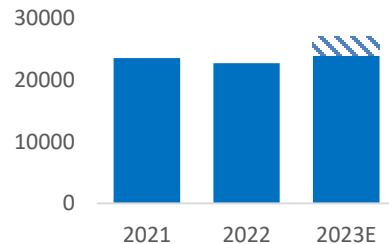
刚果（金）铜业务（万吨）



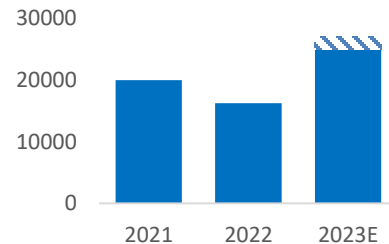
刚果（金）钴业务（万吨）



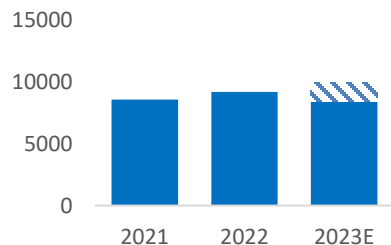
澳洲铜业务（吨）



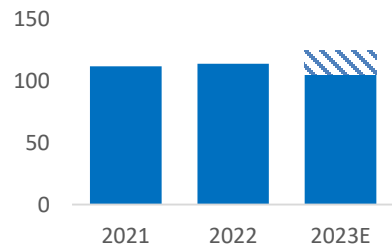
澳洲金业务（盎司）



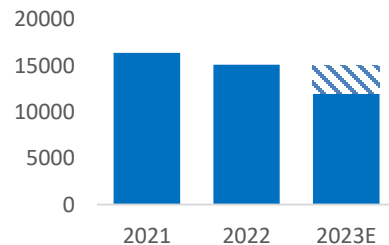
巴西铌业务（吨）



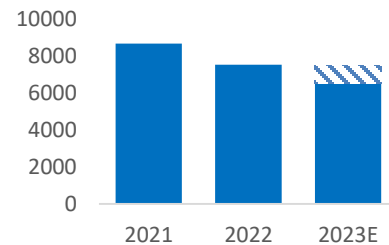
巴西磷业务（万吨）



中国钼业务（吨）



中国钨业务（吨）



资料来源：洛阳钼业2022年报，海通国际

注：澳洲铜金板块为80%口径，中国钨业务不含豫鹭矿业

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## 洛阳钼业：在建项目顺利进行，铜钴产量实现倍增

### 刚果（金）KFM铜钴矿

总投资额	18亿美元	KFM生产线全线打通，实现产铜4375吨，产钴102吨，预计4月底前完成各项重点设施安装调试及生产任务，即将实现全面投产，下半年达产，达产后预计年均产铜9万吨以上，产钴3万吨以上。
股权比例	71.25%	
原矿品种	氧化矿	
主要产品	阴极铜、氢氧化钴	

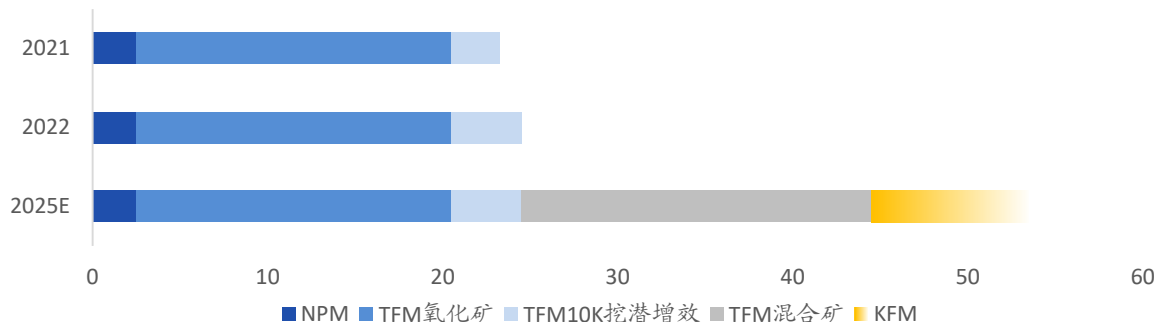
资料来源：洛阳钼业2022年报、2023一季报，海通国际

### 刚果（金）TFM混合矿

总投资额	25.1亿美元	基建剥离与土建施工任务圆满完成，中区东区安装工程进度分别为90%和30%。预计2023中区东区陆续投产，达产后混合矿项目年产20万吨铜，1.7万吨钴。TFM权益金取得重大进展，TFM出口正在恢复中。
股权比例	80%	
原矿品种	氧化矿、硫化矿	
主要产品	阴极铜、氢氧化钴	

资料来源：洛阳钼业2022年报、2023一季报，海通国际

### 洛阳钼业铜矿产能增量（万吨）



资料来源：洛阳钼业公告，海通国际

2021年铜产量23.3万吨；10K项目达产

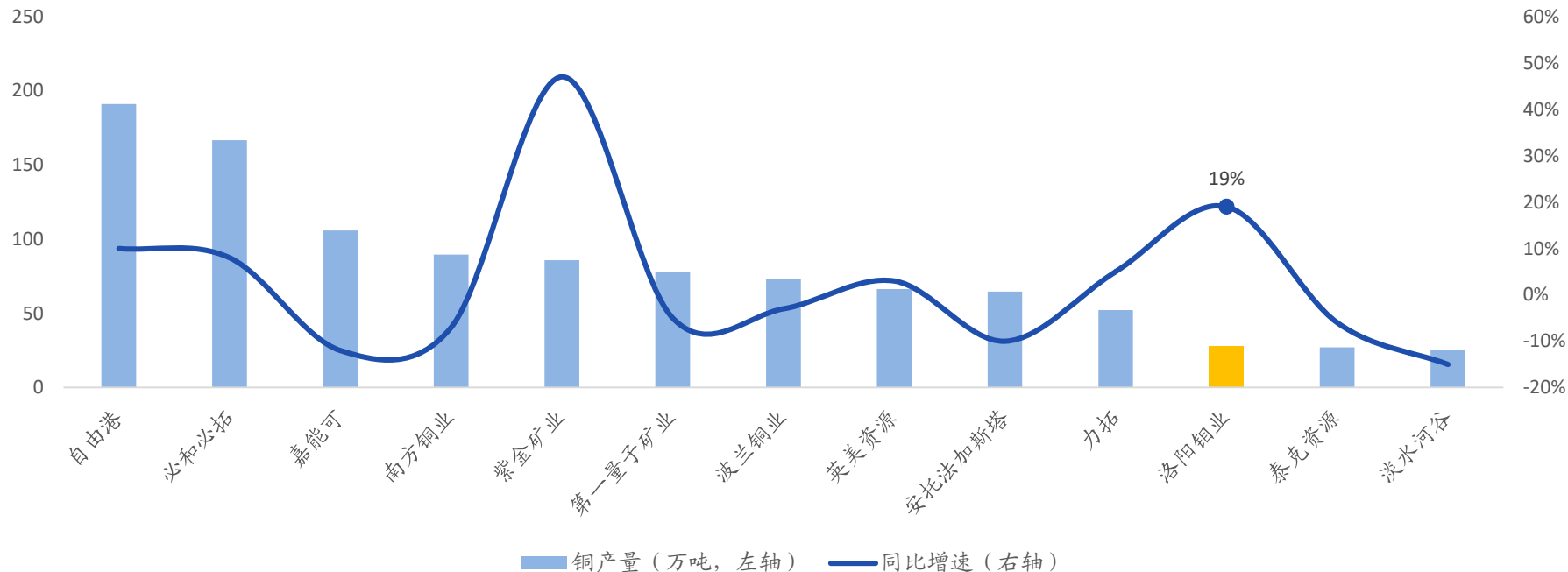
2022年铜产量27.7万吨

TFM混合矿、KFM达产，铜增量约29万吨

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# 洛阳钼业：在建项目顺利进行，铜钴产量实现倍增

## 2022年全球矿企铜产量及同比变化



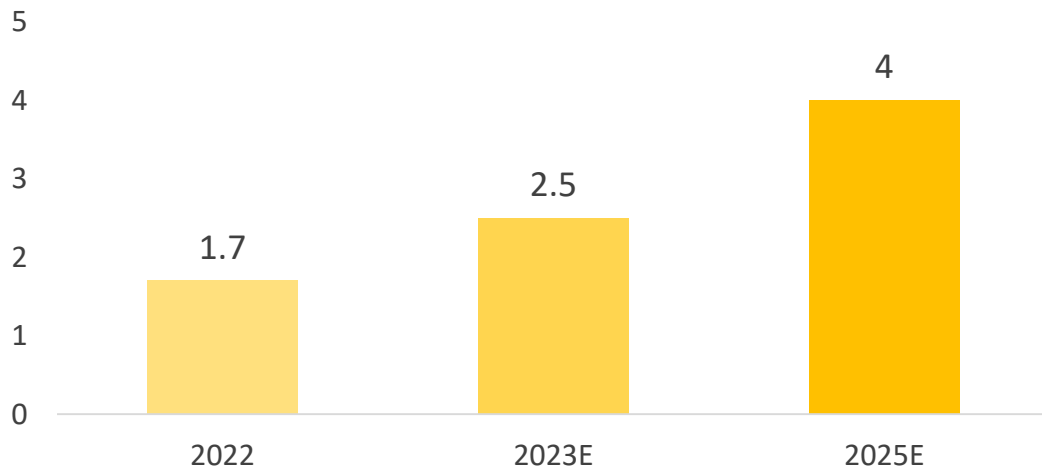
资料来源：洛阳钼业，海通国际

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## 金力永磁：矗立于新能源车赛道，磁材龙头不容小觑

公司产能建设逐步推进，预计2025年可达4万吨钕铁硼毛坯产能。目前公司的毛坯产能已具备年产2.3万吨的生产能力，在包头投资建设的一期项目8000吨钕铁硼已完全投产，包头1.2万吨二期项目和宁波3000吨及1亿台套组件项目正在建设中，规划2024-2025年在赣州新建2000吨高效节能电机用磁材基地项目。随着扩产计划的逐步落实，2025年公司将在国内将建成高性能钕铁硼永磁材料年产能4万吨。

金力永磁钕铁硼毛坯产量（万吨）



资料来源：金力永磁2022年报，海通国际

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## 中国黄金国际：两大矿山撑起超十亿美元营收，充分受益金属价格上升周期

长山壕矿位于中国内蒙古自治区，该资产有两个低品位、近地表的黄金矿床，以及其他矿化物。由内蒙古太平矿业有限公司（中国合作经营企业）拥有及经营，本公司持有其96.5%权益，宁夏回族自治区核工业地质勘查院持有其余下3.5%权益。

长山壕矿目前日产矿石量为40000吨，年产黄金约4.6吨。该矿山已完成外围及深部资源勘探，2022年探明及控制资源量估算同比增加130%，矿山寿命有望延长至少15年。

2022年公司营收中来自长山壕矿的销售收入为2.68亿美元，较2021年同期的2.66亿美元增加130万美元，约占总营收24%。

黄金产销量保持稳定，生产成本由增转降。2022年长山壕矿的黄金产销量为4.6吨，同比持平。2022年长山壕矿黄金的总生产成本为1340美元/盎司，同比下降12.9%；现金生产成本为803美元/盎司，同比下降24.4%。



资料来源：公司2022年报，海通国际



## 中国黄金国际：两大矿山撑起超十亿美元营收，充分受益金属价格上升周期

甲玛矿是大型铜金多金属矿床，蕴含铜、黄金、银、钼、铅和锌，位于中国西藏自治区的冈底斯矿化带，以地下采矿作业及露天作业方式开采。公司持有其100%权益。

2010年下半年，甲玛矿区一期开始进行采矿作业，并于2011年初达到设计产能6000吨/日。甲玛矿区二期于2018年开始进行采矿作业，设计产能为4.4万吨/日，于2020年达产。甲玛矿的综合采矿及选矿能力为5万吨/日，年产8.5-9万吨铜+3吨黄金。目前甲玛的资源储量可供稳定开采30年，现金成本2.12美元/磅，总成本2.8美元/磅（按单铜矿计算）。

2022年公司营收中来自甲玛矿区的销售收入为8.37亿美元，较2021年同期的8.71亿美元减少338万美元，占总营收比例为76%。



资料来源：公司2022年报，海通国际

甲玛矿2022年底矿产资源量

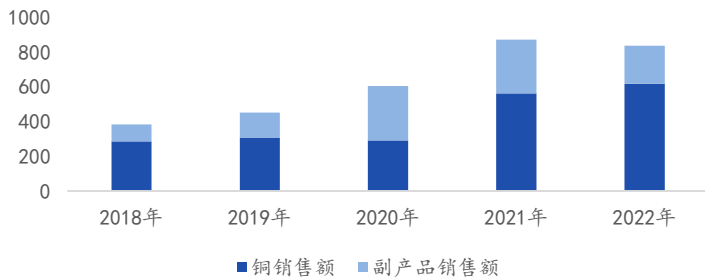
矿产资源种类	矿石量	铜	钼	铅	锌	金	银	铜金属	钼金属	铅金属	锌金属	金	银
	百万吨	%	%	%	%	克/吨	克/吨	千吨	千吨	千吨	千吨	百万盎司	百万盎司
探明	91.94	0.38	0.04	0.04	0.02	0.07	5.05	350.6	33.7	33.5	16.8	0.216	14.921
控制	1,315.48	0.40	0.03	0.05	0.03	0.10	5.48	5,216.8	451.9	613.1	380.0	4.197	232.005
探明+控制	1,407.42	0.40	0.03	0.05	0.03	0.10	5.46	5,567.4	485.6	646.6	396.8	4.412	246.926
推断	406.10	0.31	0.03	0.08	0.04	0.10	5.13	1,247.0	123.0	311.0	175.0	1.317	66.926
总计	1,813.52	0.38	0.03	0.06	0.03	0.10	5.39	6,814.4	608.6	957.6	571.8	5.729	313.852

资料来源：公司2022年报，海通国际

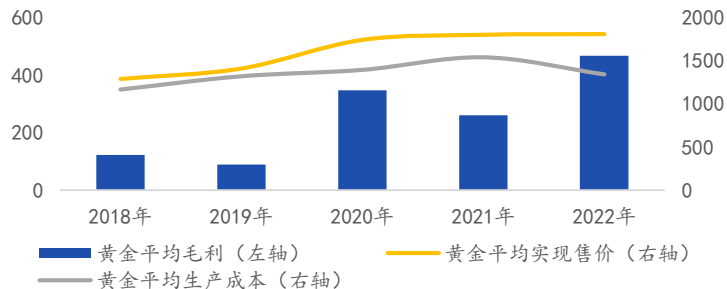
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# 中国黄金国际：两大矿山撑起超十亿美元营收，充分受益金属价格上升周期

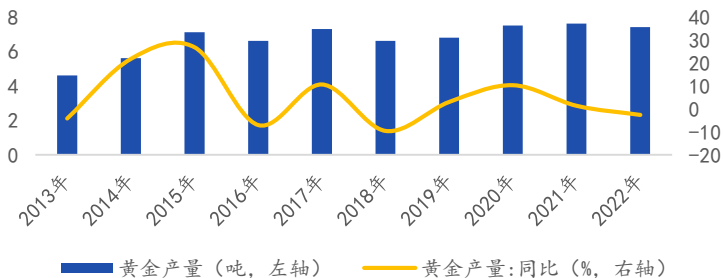
甲玛矿历年收入结构 (百万美元)



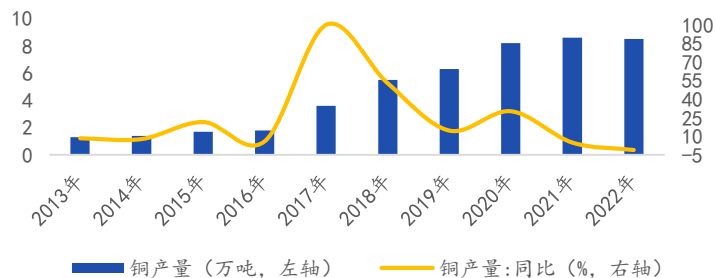
长山壕矿黄金盈利情况 (美元/盎司)



公司历年黄金产量



公司历年黄金产量



资料来源：公司年报，海通国际

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全球经济增长不确定性；新能源车销量不及预期。

## Summary

**Copper:** From 2022 to 2026, global copper mining capacity is expected to increase by 3.18 million tons, with a CAGR of 2.74%. The demand for copper in the power grid accounts for the highest proportion, and the development of new energy vehicles increases the amount of copper. Looking ahead, new energy demand continues to grow, the Fed's interest rate hike may end this year, and copper prices are expected to rise.

**Precious metals:** Since the beginning of November 2022, a number of factors have supported demand, and the price of gold has been rising. The Fed suspended interest rate hikes in June as scheduled, and there may be two rate hikes this year. Reviewing the performance of gold and copper commodity prices in the US dollar's historical interest rate hike cycle, gold mostly showed an upward trend within one year after the end of the interest rate hike.

**Rare earths:** In 2022, the price of praseodymium oxide and neodymium oxide hit a decade high, and the price has moved slightly down in recent months, but it has stabilized overall, and the price center of rare earths has moved up throughout the year.

**Aluminum:** Yunnan, China's fourth-largest aluminium producing province, accounts for 10.4% of national production and 6.1% of global production. The total scale of resumption of production in Yunnan may be 110-1.3 million tons.

**Lithium:** In 2022, the price of lithium carbonate rushed as high as 600,000 yuan / ton, and at the end of April this year, the price of lithium carbonate fell all the way back to about 180,000 yuan / ton, and then began to stop falling and rise, and now returns to 300,000 yuan / ton, and it is expected that the price of battery-grade lithium carbonate in the second half of the year will be stable at about 300,000 / ton.

**Recommended targets:** Zijin Mining, Luoyang Molybdenum Industry, Jinli Permanent Magnet, China Gold International.

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Haitong expects to receive, or intends to seek, compensation for investment banking services in the next three months from 002738.CH and 1258.HK.

海通在过去的12个月中从金世旗国际控股股份有限公司, 000878.CH, 000630.CH 及 封开县威利邦木业有限公司 获得除投资银行服务以外之产品或服务的报酬。

Haitong has received compensation in the past 12 months for products or services other than investment banking from 金世旗国际控股股份有限公司, 000878.CH, 000630.CH and 封开县威利邦木业有限公司.

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## 分析师股票评级

**优于大市**，未来12-18个月内预期相对基准指数涨幅在10%以上，基准定义如下

**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。

**弱于大市**，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, 美国 – SP500; 其他所有中国概念股 – MSCI China.

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## Analyst Stock Ratings

**Outperform:** The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

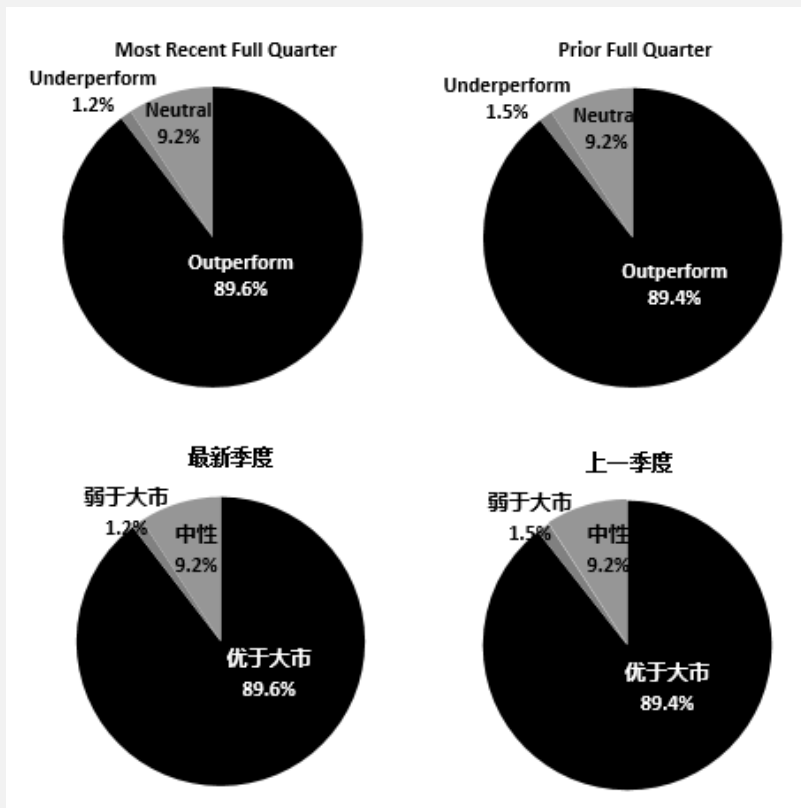
**Neutral:** The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

**Underperform:** The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

**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.



## 评级分布 Rating Distribution



# APPENDIX 2

## 截至2023年3月31日海通国际股票研究评级分布

	优于大市	中性 (持有)	弱于大市
海通国际股票研究覆盖率	89.6%	9.2%	1.2%
投资银行客户*	5.2%	6.4%	9.5%

\*在每个评级类别里投资银行客户所占的百分比。

上述分布中的买入，中性和卖出分别对应我们当前优于大市，中性和落后大市评级。

只有根据FINRA/NYSE的评级分布规则，我们才将中性评级划入持有这一类别。请注意在上表中不包含非评级的股票。

### 此前的评级系统定义（直至2020年6月30日）：

**买入**，未来12-18个月内预期相对基准指数涨幅在10%以上，基准定义如下

**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。

**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.

### Haitong International Equity Research Ratings Distribution, as of Mar 31, 2023

	Outperform	Neutral (hold)	Underperform
HTI Equity Research Coverage	89.6%	9.2%	1.2%
IB clients*	5.2%	6.4%	9.5%

\*Percentage of investment banking clients in each rating category.

BUY, Neutral, and SELL in the above distribution correspond to our current ratings of Outperform, Neutral, and Underperform.

For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category. Please note that stocks with an NR designation are not included in the table above.

### Previous rating system definitions (until 30 Jun 2020):

**BUY:** The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

**NEUTRAL:** The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below.

For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

**SELL:** The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

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

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