

2021

上海原油期货 市场发展报告

SHANGHAI CRUDE OIL FUTURES
MARKET DEVELOPMENT REPORT



上海期货交易所
SHANGHAI FUTURES EXCHANGE

上海国际能源交易中心
SHANGHAI INTERNATIONAL ENERGY EXCHANGE

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Timeline of Milestone Events
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Crude Oil Futures

上海原油期货大事记

- 2018.3.15 ● 上期能源完成香港**自动化交易服务（ATS）**注册。
- 2018.3.26 ○ 原油期货作为**中国首个国际化商品期货**上市。
- 2018.4.12 ○ 日交易量突破5万。
- 2018.5.9 ○ 日交易量突破10万。
- 2018.5.3 ○ 持仓量突破1万。
- 2018.6.20 ○ 国内首船期货原油卸至大连中石油国际储运有限公司指定交割库。
- 2018.8.8 ○ 日交易量突破**20万**。
- 2018.11.15 ○ 获得新加坡金融管理局（MAS）批准，**成为认可的市场经营者（RMO）**。
- 2019.3.26 ○ 发布原油价格指数。
- 2019.6.24 ○ 境外开户数量涵盖4大洲12个国家和地区。
- 2019.10.30 ○ 增加中石化海南原油期货交割存放点，核定库容100万立方米，启用40万立方米。
- 2020.3.11 ○ 日盘交易量突破**20万**。
- 2020.3.12 ○ 总持仓量突破**10万**。
- 2020.4.16 ○ 增加大连北方油品储运有限公司作为原油期货指定交割仓库，增加大连中石油国际储运有限公司国际储备库作为原油期货指定交割仓库存放点。
- 2020.4.17 ○ 增加中化弘润石油储运（潍坊）有限公司作为原油期货指定交割仓库。
- 2020.4.20 ○ 达上市以来最高持仓量18.84万手。
- 2020.4.24 ○ 增加中国石化集团石油商业储备有限公司广东省湛江市临港工业园兴港大道湛江商储分公司、河北省唐山市曹妃甸工业区曹妃甸商储分公司作为原油期货指定交割仓库存放点。
- 2020.5.19 ○ 达上市以来最高成交量49.48万手。
- 2020.6.3 ○ 上期所和上期能源被纳入欧洲证券及市场管理局（ESMA）的第三国交易场所交易后透明度评估正面清单。
- 2020.8.1 ○ 达上市以来单月最大交割量1385.9万桶。
- 2020.9.7 ○ 增加大连中石油国际储运有限公司广西中石油国际储备库作为原油期货指定交割仓库存放点。
- 2020.10.12 ○ 推出原油期货结算价交易指令（TAS），发布日中交易参考价（Marker Price）。
- 2020.12.1 ○ 穆尔班原油被列入上海原油期货的可交割油种之中。自2021年6月1日起，穆尔班原油可入库生成标准仓单，并用于期货交割。
- 2020.12.31 ○ 境外参与者涵盖5大洲（亚洲、非洲、欧洲、北美洲、大洋洲）23个国家和地区，可以参与上期能源交易的白名单国家共58个。

To be continued……

获奖情况

2020年11月16日，Risk.Net集团举办“2020亚洲能源风险大会暨能源风险颁奖典礼”，将上期能源评为“年度最佳大宗商品交易所”。评审团认为，“尽管新冠疫情带来市场波动，上海国际能源交易中心在对外开放方面依然加快步伐，不断扩大境外参与者人数，根据市场需求快速扩大原油期货交割库容，以出色的成绩获得了投资者和专业评审团的认可”。



2018.3.15	●	INE was approved as Automated Trading Services (ATS) by the Securities & Futures Commission of Hong Kong.
2018.3.26	○	Shanghai crude oil futures became China's first commodity futures product open to overseas investors.
2018.4.12	○	The daily trading volume exceeded 50,000 lots.
2018.5.9	○	The daily trading volume exceeded 100,000 lots.
2018.5.3	○	The open interest exceeded 10,000 lots.
2018.6.20	○	The first ship of deliverable crude was unloaded into the designated delivery storage facility of Dalian PetroChina International Warehousing & Transportation Co., Ltd.
2018.8.8	○	The daily trading volume exceeded 200,000 lots.
2018.11.15	○	INE was approved by the Monetary Authority of Singapore (MAS) as a Recognized Market Operator (RMO).
2019.3.26	○	INE launched the crude oil price index.
2019.6.24	○	Overseas investors covered 12 countries and regions across 4 continents.
2019.10.30	○	Sinopec Hainan company became a storage site of crude oil futures delivery, with an approved capacity of 1,000,000 cubic meters and an active capacity of 400,000 cubic meters.
2020.3.11	○	The trading volume in the day trading session exceeded 200,000 lots.
2020.3.12	○	The open interest exceeded 100,000 lots.
2020.4.16	○	Dalian North Oil Petroleum Logistics Co., Ltd. became a designated delivery storage facility, and Dalian PetroChina International Warehousing & Transportation Co., Ltd. became a storage site of designated delivery storage facility.
2020.4.17	○	Sinochem Hongrun Oil Staging (Weifang) Co., Ltd. became a designated delivery storage facility.
2020.4.20	○	The open interest hit a new high of 188,400 lots.
2020.4.24	○	Sinopec Petroleum Reserve Co., Ltd. Zhanjiang Branch at Lingang Industrial Zone, Xingang Avenue, Zhanjiang, Guangdong Province, and Sinopec Petroleum Reserve Co., Ltd. Caofeidian Branch at Caofeidian Industrial Zone, Tangshan, Hebei Province became the storage points for designated delivery storage facility.
2020.5.19	○	The trading volume hit a new high of 494,800 lots.
2020.6.3	○	The Shanghai Futures Exchange and INE were added to ESMA post-trade transparency positive list as third-country trading venues.
2020.8.1	○	The monthly delivery quantity hit a new high of 13.86 million barrels.
2020.9.7	○	Guangxi PetroChina International Reserve Depot of Dalian PetroChina International Warehousing & Transportation Co., Ltd. became a storage site of designated delivery storage facility.
2020.10.12	○	INE launched TAS order and released the Marker Price.
2020.12.1	○	Murban crude oil was added as another deliverable crude oil, eligible to be loaded in for the issuance of standard warrants and futures delivery from June 1, 2021.
2020.12.31	○	Overseas participants covered 23 countries and regions across 5 continents (Asia, Africa, Europe, North America, and Oceania), 58 countries are in INE's white list for trading.

To be continued.....

| Honors |

On November 16, 2020, INE was honored “Commodities Exchange of the Year, Asia” by Risk. Net at the Energy Risk Asia Awards and Conference 2020. The jury remarked, “INE continued to progress its global ambitions this year despite Covid-19 causing national lockdowns and logistical turbulence. As well as expanding its roster of overseas traders, the bourse showed its agility by increasing its storage capacity in a swift reaction to client demand. These and other achievements led Energy Risk to select it as the commodities exchange of the year in the 2020 Energy Risk Asia Awards.”



02

Shanghai Crude Oil Futures
Market Development Report

上海原油期货市场发展报告

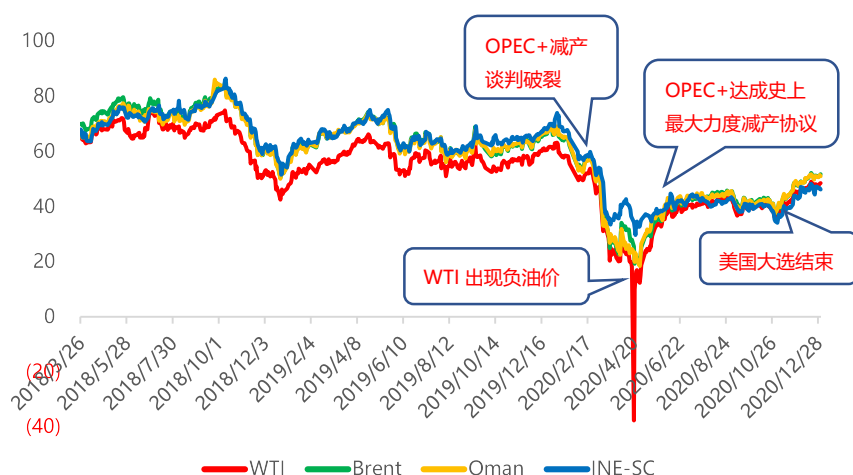
上海原油期货市场发展报告

2020年，上海原油期货经历极端事件考验，总体运行稳中有进，价格独立性初现，较好反映了亚洲原油供需关系，与欧美原油期货形成良好互补关系，成交持仓大幅上升，投资者结构持续优化，市场功能发挥显著，规则制度获得国际市场广泛认可，呈现良好发展态势。

一、历经极端事件考验，市场运行质量有效提升

2020年，受新冠肺炎疫情快速蔓延、OPEC+减产谈判失败、沙特大幅增产并下调销售价格影响，国际油价出现大幅快速下跌行情。3月9日，WTI、Brent原油期货盘中最大跌幅均超过30%，创史上最高单日跌幅；4月20日，WTI原油期货出现史上首次负油价，最低跌至-40.32美元/桶，当日触发熔断30余次。此后，在OPEC有效减产、新冠疫苗推出等因素推动下，国际油价震荡上行。

图1 全球主要原油期货价格比较



面对极端市场考验，上海原油期货展现出较强的韧性和自我修复能力。自3月9日起，上海原油期货出现连续2日单边市，且第3日触及跌停板，交割库容也出现

持续紧张的局面。为防范市场风险，上海国际能源交易中心认真研判市场情况，充分利用规则，通过适时动态调整涨跌停板、保证金、仓储费，及时扩大交割库容等一系列组合拳，有效释放了市场风险，为全球原油价格重回理性平衡点发挥作用，维护了市场稳定，提升了市场规模和运行质量。

（一）市场规模不断扩大，在国际市场赢得一席之地

2020年，上海原油期货交易量、持仓量大幅提升。全年累计成交4158.58万手，累计成交金额11.96万亿元。日均成交17.11万手,日均持仓11.89万手,较2019年分别增长20.04%和312.93%。日均成交和日均持仓分别占全球三大原油期货日均交易、持仓总量的8.14%和2.48%，较2019年分别增长1.42和1.84个百分点。自5月恢复夜盘以来，日均日盘成交占比从2019年的27%上升至44%，在亚洲交易时段发挥了更加积极的作用。在美国期货业协会（FIA）公布的全球能源类商品期货期权交易量排名居16位，在原油期货中市场规模仅次于WTI和Brent原油期货。

图2 原油期货每日成交量

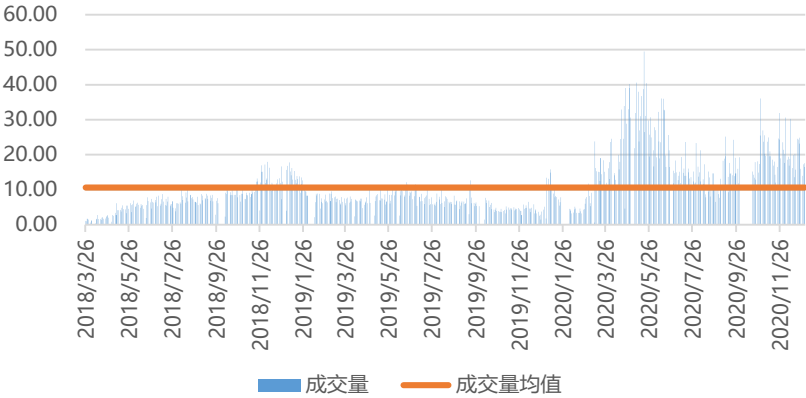
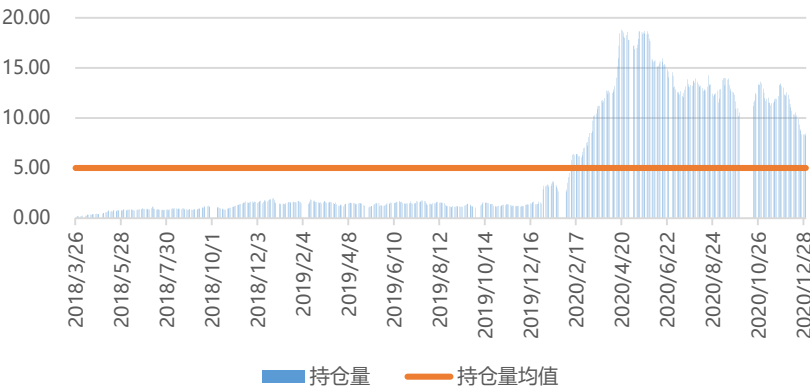


图3 原油期货每日持仓量



（二）市场结构持续优化，机构客户参与度大幅提升

2020年，上海原油期货一般法人、特殊法人日均成交量同比增长38.19%和36.29%，合计占品种日均交易量约四成；日均持仓同比增长484%和146.24%，合计占品种日均持仓约六成，反映出境内外石油公司、贸易公司和金融机构利用上海原油期货进行风险管理和资产配置的意愿增强。独立炼厂、航空公司也逐步利用上海原油期货进行套期保值。

在机构客户积极参与以及做市商的共同作用下，上海原油期货远月合约流动性有效提升，市场结构持续优化。2020年，主力合约日均成交、持仓占比从2019年的85.39%和63.50%分别下降至57.45%和38.84%，流动性逐步向远月合约溢出，连续活跃月份从近3月已扩展至近5月合约。

（三）国际参与度持续提高，认可度进一步增强

截至2020年底，上海原油期货境外客户同比增幅85.7%，分布在五大洲23个国家和地区。境外客户日均成交量、持仓量占比约20%和25%，同比均增长3个百分点。备案的境外中介机构合计达66家，新增境外特殊经纪参与者1家。路透社、华尔街日报、俄罗斯卫星通讯社、南华早报等境外主流媒体评论正面积极，称中国的监管制度使得上海原油期货价格免受过度波动，以人民币计价的合约正逐步被市场接受，国际大型经纪机构、贸易商参与积极，中国影响力正迅速增强。此外，2020年6月，能源中心被纳入欧洲证券及市场管理局（ESMA）的第三国交易场所交易后透明度评估正面清单。

（四）交割规模实现跨越式增长，市场基础更为牢固

2020年4月以来，我所通过丰富交割仓库布点、增加现有仓库库容等方式，在全市场仓储库容整体紧张的情况下，全力扩大期货市场可交割区域。交割库点由2019年底的9个增加到15个，交割库容由年初的355万方扩大至年底的1190万方（约6788万桶），保证了原油交割顺利进行。2020年，累计交割8515.9万桶，是2019年的4.8倍。

图4 原油交割量（按合约统计）

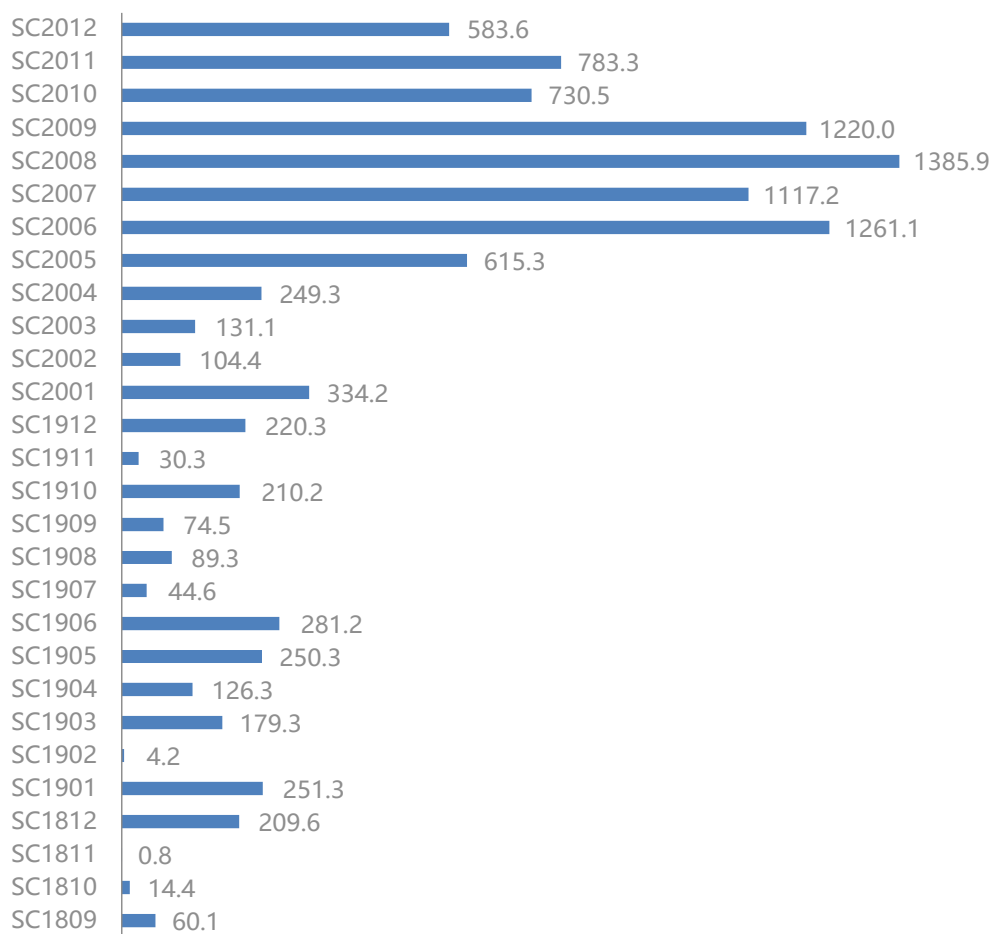
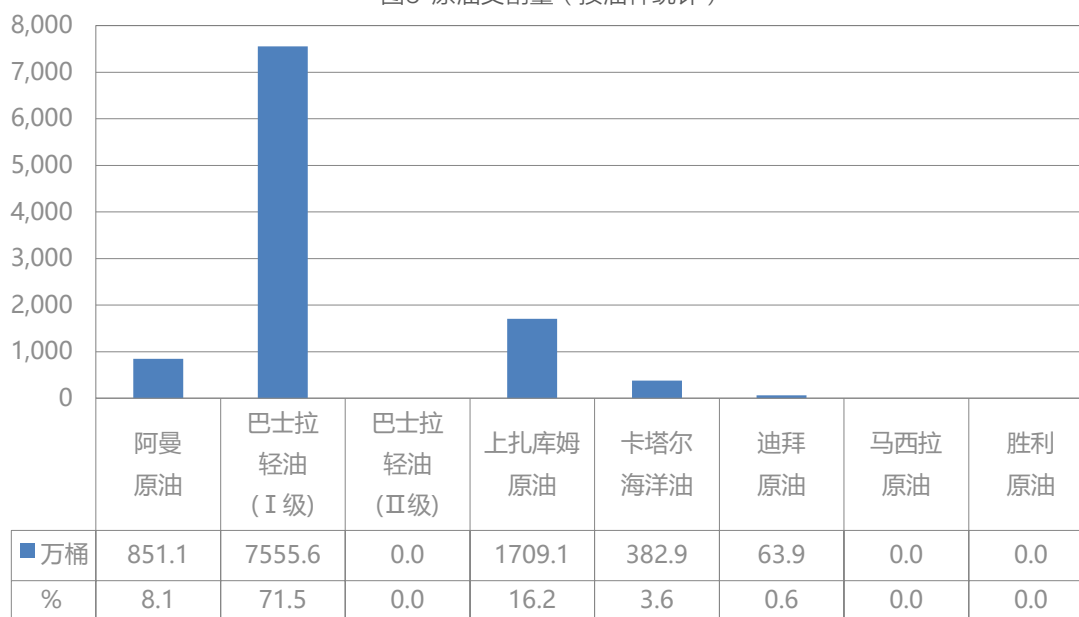


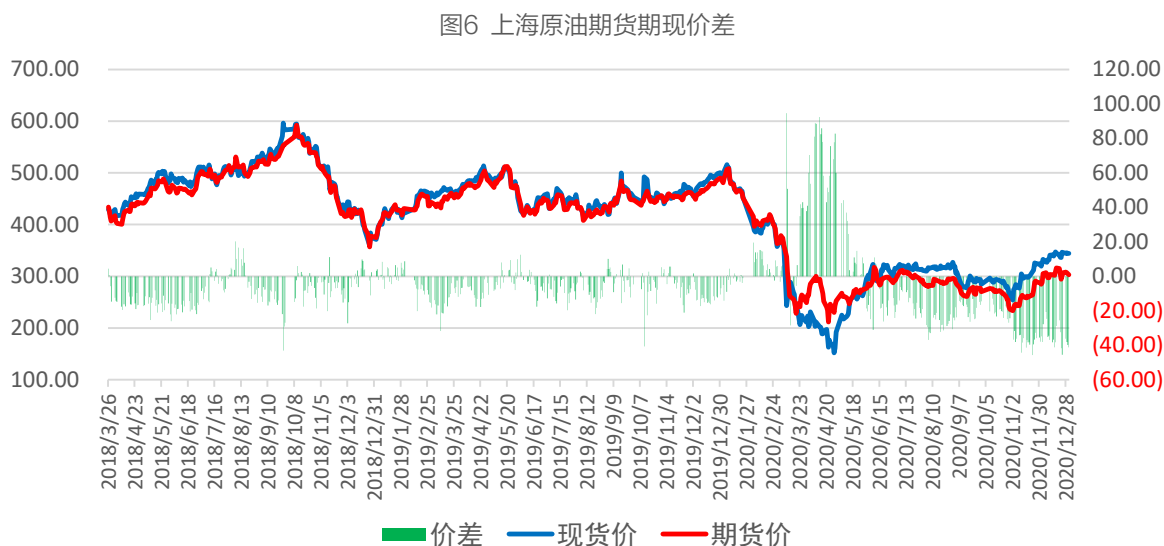
图5 原油交割量（按油种统计）



二、价格代表性逐步增强，服务实体经济效果明显

（一）价格客观反映国内供需，并逐步由境内到岸价向亚太地区贸易集散地价格转变，亚洲时段代表性明显提升

2020年，上海原油期货与国际油价有机联动，同时，更有效反映了国内基本面情况，价格独立性初现。3月中下旬开始，伴随国内疫情趋稳，复工复产加速推进，上海原油期货价格较境外市场率先企稳，反应了国内经济率先恢复的实际情况。6月以后，随着境内原油供应和库存逐步充裕，价格开始小幅贴水国际油价。上海原油期货较理论现货价价差最高94.64元/桶，最低-45.58元/桶，全年平均-5.48元/桶。当年，以上海原油期货结算价计价的原油在交割出库后，转运到了韩国、缅甸、马来西亚等国家，相关国家涉油企业在现货贸易中更加关注上海价格，一个辐射亚太地区的原油贸易集散地价格已初现雏形。



从日内交易分布看，全年日均日盘占比从2019年的27%上升至55%，更加高效地反映亚洲市场供需现状。

（二）助力实体企业渡过难关，促进现货市场健康发展，切实服务实体经济

一是帮助实体企业通过原油期货锁定价格，有效管理价格波动风险。从中东采购的原油运抵我国大约需要20天，采购和销售环节之间的时间差对企业而言存在较大价格风险，期间油价下跌会影响销售利润。企业在采购的同时，通过在对月份期货合约上建立同等规模的卖出头寸，有效规避了运输期间的价格波动风险，锁定了利润。**二是通过卖出交割，拓宽销售渠道。**2020年3-4月，因疫情叠加沙特大幅增产的影响，国际原油需求萎缩，油价大幅崩跌，石油公司长约合同和份额油销售

极度困难。国内虽加工量减少，但未来生产恢复预期上升，上海原油期货较境外出现溢价。石油公司通过卖出原油期货实现了对份额油的保值增值，消化了因需求减少而多出的长约原油实货。**三是通过买入交割，降低企业原材料成本。**6-7月间，因上海原油价格相对于国际市场出现明显贴水。石油公司通过从上海原油期货交割提货方式，供应系统内炼厂，有效降低了采购成本，为企业提供了额外收益。**四是通过原油期货扩大商业库存，提升我国能源安全水平。**得益于上海原油期货快速扩大的交割库容和价格优势，境内外产业企业积极参与卖出交割，实现了石油商业储备的快速增长。**五是推动保税现货贸易发展。**2020年，原油期货仓单转让和期转现规模呈现跨越式增长，总规模近5000万桶。企业通过仓单转让和期转现优化现货资源配置，推动了保税现货贸易发展。

三、立足产业需求，参考国际惯例，推动交易机制创新

2020年10月12日，国内首个TAS指令在原油期货合约实施。业务上线以来，境内外大型石油公司、贸易商、炼厂正逐步参与。截至2020年底，共成交758手，成交金额2.06亿元。

TAS的推出，有效提升了基于上海原油期货结算价计价交易的套期保值效率。以仓单交易套保为例，10月19日第一节交易时段，两家企业通过TAS成交305手，对即将在10月20日进行转让的仓单完成套保操作。企业A持有仓单，并已在SC2011合约建立空头持仓对仓单进行了保值；企业B希望能获得其仓单。根据仓单转让相关规定，原油期货标准仓单转让价格为申请日前一交易日结算价 $\pm 2\%$ 范围内。因此，双方约定在10月20日以10月19日SC2011的结算价进行仓单转让。企业A在10月19日通过TAS指令对持有的SC2011空头持仓进行平仓了结；企业B在10月19日在SC2011合约以TAS指令建立了空头套保持仓，对即将买入的仓单进行保值，实现了精准套保。

随着机构客户对TAS了解和运用的不断深入，将进一步拓展上海原油期货结算价在现货贸易和金融投资中的运用场景。

四、结束语

2020年，上海原油期货有效应对了极端市场风险，运行质量和市场规模大幅提升，为实体企业管理风险提供了切实可靠、稳定有效的工具。2021年，我们将加快上线原油期货期权、稳步推进天然气、成品油期货研发，不断完善产品序列。同时，持续优化TAS指令，研究价差合约，推进交易机制创新，持续深化市场服务。

上海原油期货年度之“最”

表 1. 价格表现									
开盘价	最高价	最低价	收盘价	30 日历史波动率 (%)			期现价差 (元/桶)		
				最高	最低	平均	最高	最低	平均
483.7	529.8	210.6	301.7	13.81	2.55	7.66	94.64	-45.6	-5.48

表 2. 交易情况							
交易						持仓	
累计成交 (万手)	累计成交额 (万亿)	日均成交 (万手)	日均成交额 (亿)	最高成交 (万手)	日盘占比 (%)	日均持仓 (万手)	最高持仓 (万手)
4158.6	11.96	17.11	492.23	49.48	55.23	11.89	18.44

表 3. 交割							
累计交割 (万桶)	累计交割额 (亿元)	交割量最 大合约	单月最大 交割量 (万桶)	交割量最大 油种	最大油种 交割量 (万桶)	交割量最 大油库	最大油库 交割量 (万桶)
8515.9	233.5	SC2008	1385.9	巴士拉轻油	7555.6	中化弘润	3622.9

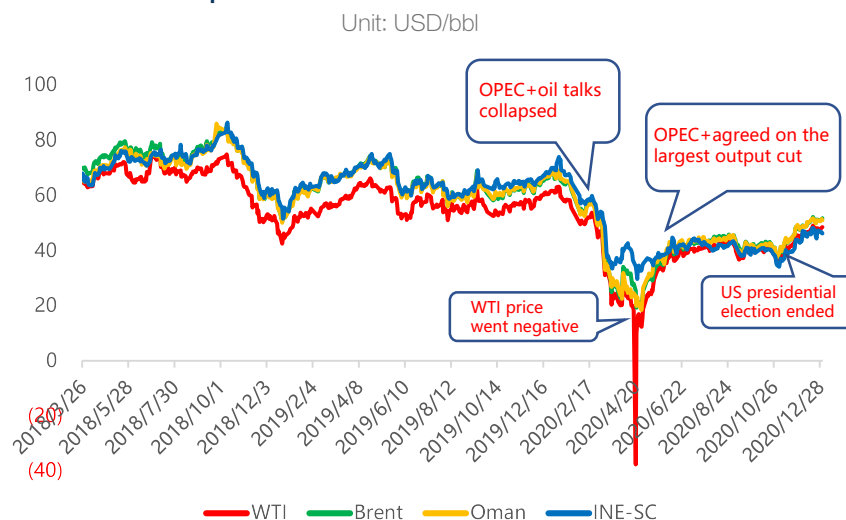
2021 | Shanghai Crude Oil Futures Market Development Report

Navigating through the extreme events in 2020, Shanghai crude oil futures (SC) has witnessed steady and sound growth, with positive development momentum. Its price independence has been preliminary formed, which better reflects the supply and demand of crude oil in Asia and forms a good complementary relationship with crude oil futures in Europe and the United States. It also witnessed increasing trading volume and open interest, improving investor structure, better market functions, and wider international recognition for its trading rules.

I. Improved Market Operations after Extreme Events

In 2020, the global oil price plummeted due to the Covid-19 pandemic, the collapsing OPEC+ oil negotiations, and the production boost and price cut by Saudi Arabia. On March 9, both the WTI and Brent crude futures prices slumped up to 30%, the sharpest drop ever. On April 20, the WTI price even crashed into negative for the first time in history—bottomed at USD -40.32/barrel, and triggered more than 30 circuit breakers. Oil price then rose in the wake of several good news including OPEC+’s output cut and the vaccine launch.

Figure 1 Price Comparison with Main Global Crude Oil Benchmarks



Despite extreme market conditions, SC has demonstrated fairly strong resilience and self-recovery capacity. Since March 9, this product saw a limit-locked market for two consecutive days and hit the lower price limit on the third day. Delivery capacity was also under constant pressure. To prevent potential risks, upon careful analysis of the market, the Shanghai International Energy Exchange (INE) timely adjusted the price limit, trading margin, and storage fees of SC, and expanded the storage capacity of designated delivery storage facilities for crude oil. This set of measures effectively mitigated risks, contributed to helping the prices of global crude oil futures back to the rational level, maintained market stability, expanded market size, and improved market operation.

1. Expanding market size brings increasing influence in the global market

In 2020, both the trading volume and open interest of SC increased significantly. Specifically, the cumulative trading volume reached 41.58 million lots, and the cumulative market turnover totaled RMB 11.96 trillion. The average daily trading volume (ADTV) was 171,100 lots, up 20.04% from 2019; the average daily open interest (ADOI) was 118,900 lots, up 312.93%. These two figures were respectively 8.14% and 2.48% of the aggregate of the world's top three crude oil futures, marking an increase of 1.42 and 1.84 percentage points from last year. Since the resumption of night trading sessions in May, the proportion of average daily trading volume in the day trading session has increased from 27% in 2019 to 44%, playing a more active role during the Asian trading session. According to the Futures Industry Association (FIA), SC was ranked the 16th among global energy futures and options by trading volume and was second only to WTI and Brent by crude futures market size.

Figure 2 SC Daily Trading Volume

Unit:10,000 lots

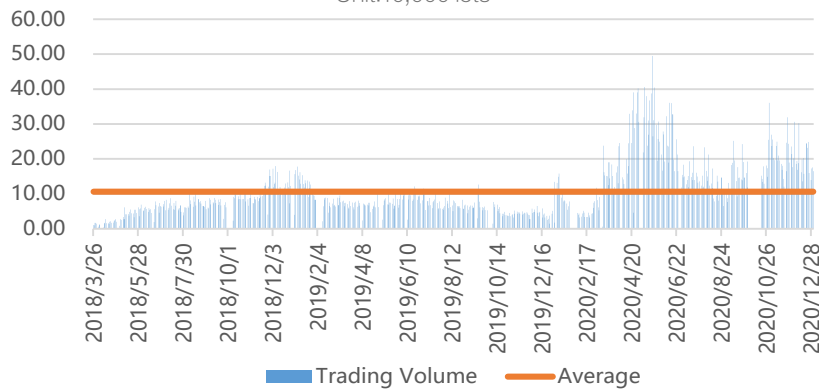
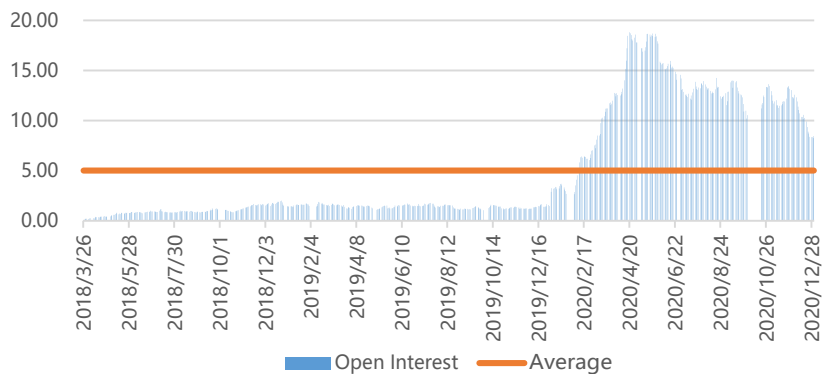


Figure 3 SC Daily Open Interest

Unit:10,000 lots



2. Increasing participation of institutional clients improves the market structure

In 2020, general legal persons and special legal persons respectively recorded a YoY increase of 38.19% and 36.29% in ADTV, and together contributed to 40% of the total ADTV. They also respectively recorded a stunning growth of 484% and 146.24% in ADOI, and together accounted for 60% of the total ADOI. The figures showed that domestic and overseas oil companies, trading houses, and financial institutions were increasingly willing to use SC in risk management and asset allocation. Moreover, independent refineries and airways have also begun to use the product for hedging purposes.

Thanks to the active participation of institutional clients and market makers, SC has more liquid forward-month contracts and an improving market structure. This year, the proportions of ADTV and ADOI of nearby-month contracts decreased from 85.39% and 63.50% in 2019 to 57.45% and 38.84%, respectively. This change means more liquidity flows to forward-month contracts. In addition, the continuous active trading months have been extended from the most recent three months to the most recent five months.

3. Increasing international participation boosts greater recognition

As of the end of 2020, the number of overseas clients has grown by 85.7% YoY, covering 23 countries and regions across 5 continents. Their ADTV and ADOI have each increased by three percentage points YoY to 20% and 25% of the total. Sixty-six overseas intermediaries and one overseas special brokerage participant have been registered with INE. Mainstream overseas media such as *Reuters*, *Wall Street Journal*, *Sputnik*, and *South China Morning Post* reported SC in a positive light, commenting that China's regulatory system has protected SC from excessive price volatility, and the RMB-denominated contracts are gradually accepted by the market, with active participation from large overseas brokerage agencies and trading houses. All these contributed to the growing influence of China. In June 2020, INE was included in the positive list of post-trade transparency of the European Securities and Markets Authority (ESMA) as a third-country trading venue.

4. Leapfrogging delivery quantity underpins the market

Since April 2020, INE has focused on expanding the delivery regions by deploying new storage facilities and enlarging existing ones, despite limited storage capacity across the market. At the end of 2020, the number of delivery facilities has increased from 9 of the previous year to 15, and the storage capacity from 3.55 million cubic meters at the beginning of the year to 11.90 million cubic meters (about 67.88 million barrels), ensuring smooth delivery. A total of 85.16 million barrels of oil were delivered in 2020, 4.8 times the 2019 figure.

Figure 4 Crude Oil Delivery Quantity (by Contract)

Unit:10,000 barrels

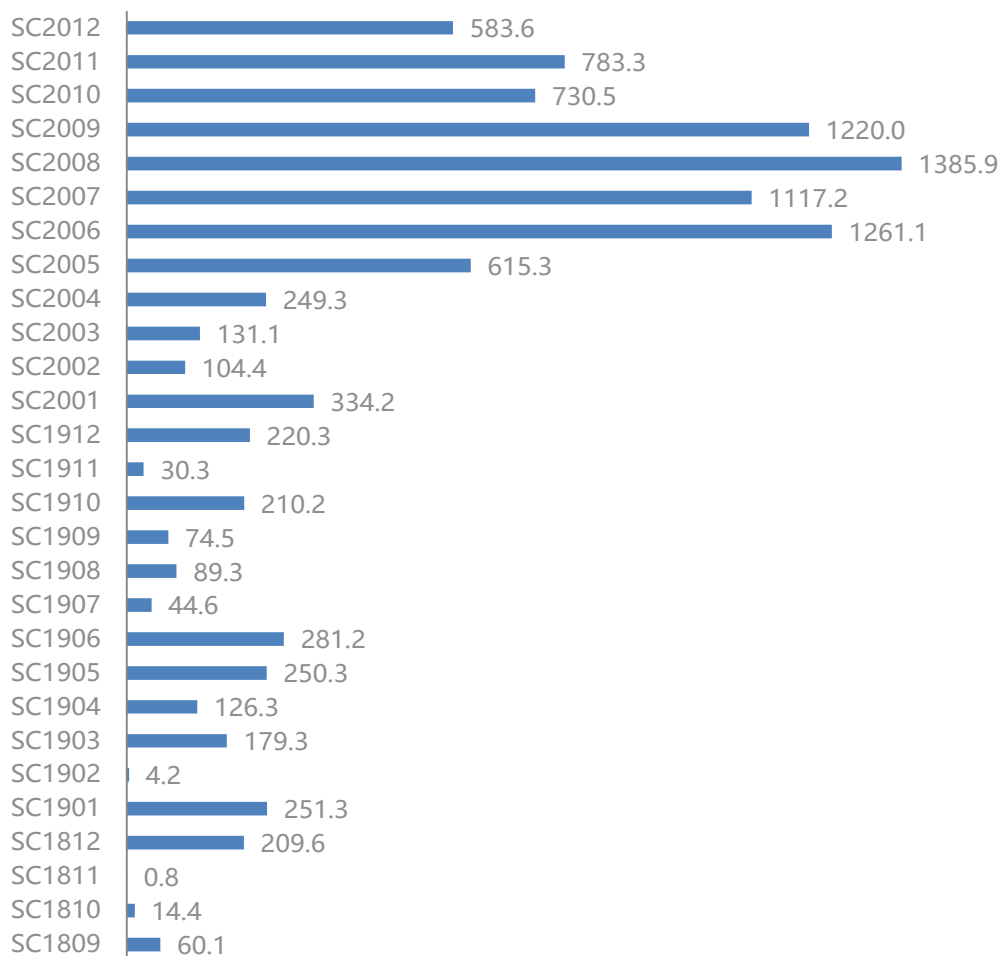
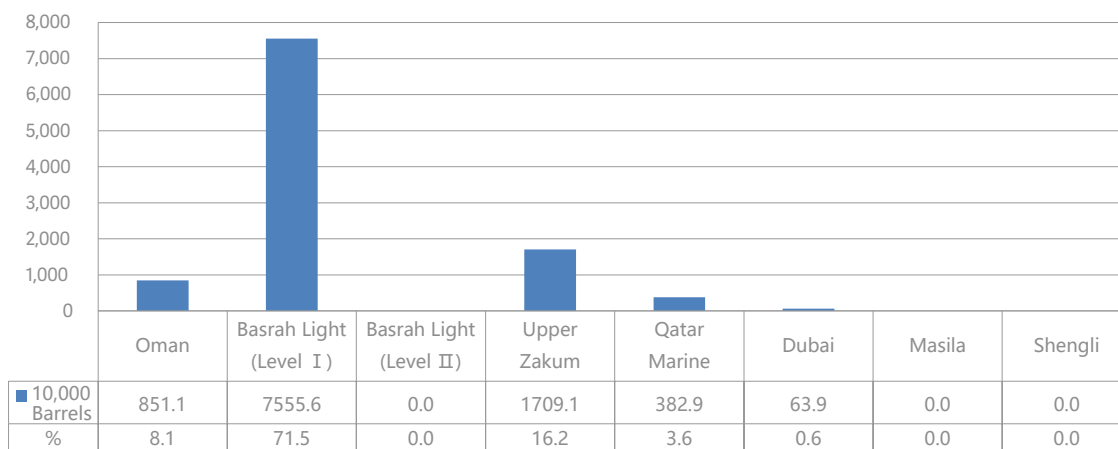


Figure 5 Crude Oil Delivery Quantity (by Deliverable Crudes)

Unit:10,000 barrels



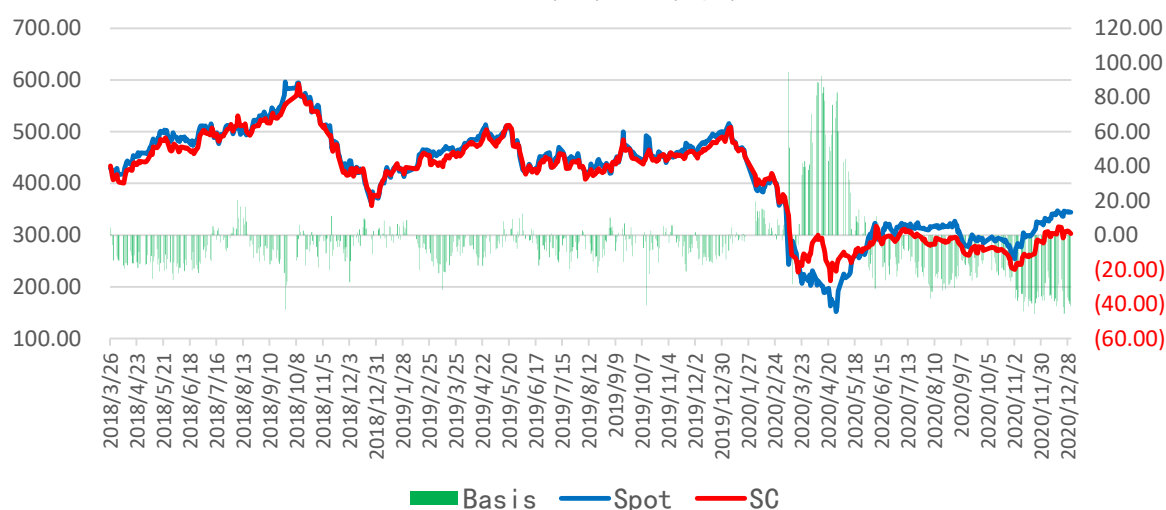
II. Enhancing price representation, and fostering the real economy

1. SC price reflects domestic supply and demand, and is shifting from a CIF price to a distribution center price in the Asia-Pacific, becoming more representative during Asian trading hours.

In 2020, the SC price was highly correlated with the global oil prices and reflected the fundamentals of China's economy, showing emerging signs of price independence. As China brought the pandemic under control and resumed work and production since mid-to-late March, the SC price recovered earlier than overseas markets, which indicated that China was taking the lead in economic recovery. After June, the price became slightly lower than the international price as a result of abundant domestic supply and inventory. During the year 2020, the difference between the SC price and the theoretical spot price was as high as RMB 94.64/barrel and as low as RMB -45.58/barrel, averaging at RMB -5.48/barrel. Crude oils settled at SC prices have been shipped to South Korea, Myanmar, Malaysia, and other countries. The price of SC has attracted more oil companies from relevant countries, and has become as a distribution center price, reflecting the Asia-Pacific market.

Figure 6 SC Price vs Spot Price

Unit: RMB (Left), USD (Right)



From the perspective of intraday trading, the proportion of average daily trading volume in the day trading session has increased from 27% in 2019 to 55%, capturing the features of Asian's market supply and demand more efficiently.

2. SC helps industrial enterprises through the difficulties, promotes the sound development of spot market, and ultimately supports the real economy.

First, industrial enterprises manage price risks by selling SC contracts. China's oil importers face substantial price risks during the period between purchase and sales, including the 20-day period of transportation from the Middle East to China. If the price drops during that period, the oil importers will lose profit. To avoid price volatility risks during transportation and lock profits, they create a same-sized short position in a corresponding SC contract upon purchasing oils.

Second, oil companies expand their sales channels by selling SC contracts for delivery. From March to April 2020, due to the combined impact of the pandemic and Saudi

Arabia's massive increase in production, the international demand for crude oil shrank and the oil price collapsed sharply. Oil companies experienced enormous difficulties in selling their long-term contracts and equity oil. Despite reduced oil processing capacity, the expectation of production recovery pushed the SC price higher than overseas prices. Nevertheless, by selling SC contracts, these oil companies protected and increased the value of their equity oil and found a way to sell the surplus from shrinking demand.

Third, oil companies lower their cost of raw materials by buying SC contracts for delivery. In June and July, the SC price was significantly lower than the international price. Oil companies hence bought SC contracts to take the underlying oil to their refineries. This effectively reduced their purchase cost and generated extra earnings.

Fourth, SC helps to improve national energy security by expanding commercial oil reserves. Thanks to the scaling up delivery capacity and price advantage of SC, domestic and overseas companies actively engaged in selling SC contracts for delivery, rapidly building up the commercial oil reserves.

Fifth, SC promotes bonded spot trading. In 2020, the transfers of SC warrants and exchanges for physicals (EFP) totaled an astounding size of nearly 50 million barrels. Industrial enterprises have in this way optimized their resource allocation and promoted bonded spot trading.

III. Launching Innovations in Trading Mechanism to Meet Industry Needs in Line with International Practice

On October 12, 2020, China's first Trade at Settlement (TAS) order was launched for SC contracts. Domestic and overseas oil giants, trading houses and refineries have since increasingly participated in TAS trading. As of the end of 2020, 758 lots were traded, and the cumulative market turnover totaled RMB 206 million.

The launch of TAS order has improved the efficiency of hedging trades which are based on the SC settlement price. Take a warrant hedging as an example. Two companies traded 305 lots of SC contracts under TAS order in the first session on October 19, hedging against possible risks from their warrants transfer to be concluded on October 20. Earlier, Company A held the warrants and had shorted SC2011 to hedge them, while Company B intended to buy the warrants. According to the rules on warrants transfer, the transfer price of SC standard warrants was $\pm 2\%$ of the SC settlement price prior to the transfer application day. The two companies agreed to complete the transfer on October 20 at the settlement price of SC2011 on October 19. On October 19, Company A closed its short positions in SC2011 through a TAS order, and Company B opened a short position in SC2011 through a TAS order to hedge the warrants to be bought.

As institutional clients learn more about TAS and use it more often, the SC settlement price is expected to be increasingly adopted by spot trading and financial product investments.

IV. Conclusion

In 2020, SC has weathered through extreme risks, achieved better market operation and larger market size, and provided industrial enterprises with a reliable, stable and effective risk management tool. In 2021, we will accelerate the launch of crude oil futures options, further research and develop natural gas and refined oil futures, as well as enrich our product offerings. Also, we will continue to optimize the TAS order, study the feasibility of contract for differences, innovate the trading mechanism, and keep improving our market services.

2020 Figures of Shanghai Crude Oil Futures

Table 1. Price Performance									
Opening Price	Highest Price	Lowest Price	Closing Price	30-Day Volatility (%)			Basis (RMB yuan/barrel)		
				Highest	Lowest	Average	Highest	Lowest	Average
483.7	529.8	210.6	301.7	13.81	2.55	7.66	94.64	-45.6	-5.48

Table 2. Trading							
Trading						Open Interest	
Cumulative trading volume (10,000lots)	Cumulative turnover (RMB trillion)	ADTV (10,000lots)	Average daily turnover (RMB 100 million)	Highest trading volume (10,000lots)	Proportion of trading volume in the day trading session (%)	ADOI (10,000lots)	Highest daily open interest (10,000lots)
4,158.6	11.96	17.11	492.23	49.48	55.23	11.89	18.44

Table 3. Delivery							
Cumulative delivery quantity (10,000 barrels)	Cumulative delivery amount (RMB 100 million)	Contract with the highest delivery quantity	Highest monthly delivery quantity (10,000 barrels)	Oil with the highest delivery quantity	Highest delivery quantity by oil (10,000 barrels)	Storage facility with the highest delivery quantity	Highest delivery quantity by storage facility (10,000 barrels)
8,515.9	233.5	SC2008	1,385.9	Basrah Light	7,555.6	Sinochem Hongrun	3,622.9

03

INE AWARDS

INE获奖名单

2020年度上海国际能源交易中心会员评优获奖名单

优秀会员奖

永安期货股份有限公司
国投安信期货有限公司
华泰期货有限公司
中银国际期货有限责任公司
上海东证期货有限公司
方正中期期货有限公司
五矿经易期货有限公司
广发期货有限公司
银河期货有限公司
中信期货有限公司

浙商期货有限公司
国泰君安期货有限公司
海通期货股份有限公司
南华期货股份有限公司
新湖期货股份有限公司
宏源期货有限公司
兴证期货有限公司
国贸期货有限公司
招商期货有限公司
中粮期货有限公司

2020年度上海国际能源交易中心优秀分析师名单

优秀产业服务团队奖

东证衍生品研究院能源研究小组
方正中期期货投资咨询部石油化工团队
国投安信期货研究院能源团队
国泰君安期货产业服务研究所能源服务研发团队
海通期货能源研发中心

优秀分析师奖

海通期货 杨 安
国投安信 高明宇
国泰君安 王 笑
宏源期货 詹建平
方正中期 隋晓影

中信建投 李彦杰
华泰期货 潘 翔
申万期货 董 超
建信期货 李 捷
国元期货 张宇鹏

2020年上海原油期货交易量排名前二十会员

华泰期货	华闻期货
中信期货	徽商期货
国信期货	方正中期
东证期货	南华期货
银河期货	永安期货
国泰君安	申万期货
海通期货	中信建投
国富期货	浙商期货
国投安信	光大期货
新湖期货	华安期货

2020年上海原油期货境外中介交易量排名前20名单

DBS Bank Ltd.
STRAITS FINANCIAL SERVICES PTE LTD
J.P. Morgan Securities plc
中国新永安期货有限公司
ABN AMRO Clearing Bank N.V.
KGI SECURITIES (SINGAPORE) PTE. LTD.
磐石金融有限公司
元大期货(香港)有限公司
Orient Futures International (Singapore) Pte. Ltd.
横华国际期货有限公司
Phillip Futures Pte Ltd
Societe Generale International Limited
中一期货有限公司
HGNH INTERNATIONAL FINANCIAL (SINGAPORE) PTE. LTD.
直达国际金融服务有限公司
群益期货(香港)有限公司
亮点国际期货有限公司
Goldman Sachs International
广发期货（香港）有限公司
金瑞期货（香港）有限公司

List of 2020 INE Outstanding Member Awards

Yong'an Futures Co., Ltd	Zheshang Futures Co., Ltd
SDIC Essence Futures Co., Ltd	Guotai Junan Futures Co., Ltd
Huatai Futures Co., Ltd	Haitong Futures Co., Ltd
BOC International Futures Co., Ltd	Nanhua Futures Co., Ltd
Orient Futures Co., Ltd	Xinhu Futures Co., Ltd
Founder CIFCO Futures Co., Ltd	Hongyuan Futures Co., Ltd
Minmetals& Jingyi Futures Co., Ltd	Industrial Securities Futures Co., Ltd
GF Futures Co., Ltd	International Trade Futures Co., Ltd
Galaxy Futures Co., Ltd	China Merchants Futures Co., Ltd
CITIC Futures Co., Ltd	COFCO Futures Co., Ltd

List of Excellent Team/Analyst Awards

Excellent Industrial Service Team Award

Orient Energy Research Group of Derivatives Research Institute
Founder CIFCO Petrochemical Team of Futures Investment Consulting Department
Energy Team of SDIC essence Futures Research Institute
Energy Service R & D Team of Guotai Junan Futures Industry Service Research Institute
Haitong Futures Energy R & D Center

Excellent Analyst Award

Haitong Futures, Yang An	China Securities Futures, Li Yanjie
SDIC Essence Futures, Gao Mingyu	Huatai Futures, Pan Xiang
Guotai Junan Futures, Wang Xiao	Shenwan Futures, Dong Chao
Hongyuan Futures, Zhan Jianping	CCB Futures, Li Jie
Founder CIFCO Futures, Sui Xiaoying	Guoyuan Futures, Zhang Yupeng

Top 20 Members List By INE Crude Oil Futures Trading Volume in 2020

Huatai Futures Co.,Ltd	Huawen Futures Co.,Ltd
CITIC Futures Co.,Ltd	Huishang Futures Co.,Ltd
Guoxin Futures Co.,Ltd	Founder CIFCO Futures Co.,Ltd
Orient Futures Co., Ltd	Nanhua Futures Co.,Ltd
Galaxy Futures Co.,Ltd	Yongan Futures Co.,Ltd
Guotai Junan Co.,Ltd	Shenwan Futures Co.,Ltd
Haitong Futures Co.,Ltd	China Securities Futures Co.,Ltd
Guofu Futures Co.,Ltd	Zheshang Futures Co.,Ltd
SDIC essence futures Co.,Ltd	Everbright Futures Co.,Ltd
Xinhu Futures Co.,Ltd	Hua An Futures Co.,Ltd

Top 20 Overseas Intermediaries List By INE Crude Oil Futures Trading Volume in 2020

DBS Bank Ltd.
STRAITS FINANCIAL SERVICES PTE LTD
J.P. Morgan Securities Plc
China Xin Yongan Futures Co., Ltd
ABN AMRO Clearing Bank N.V.
KGI SECURITIES (SINGAPORE) PTE. LTD.
BANDS Financial Limited
Yuanta Futures (Hongkong) Co.,Ltd
Orient Futures International (Singapore) Pte. Ltd.
HGNH International Futures Co., Ltd
Phillip Futures Pte Ltd
Societe Generale International Limited
Zhongyi Futures Co., Ltd
HGNH INTERNATIONAL FINANCIAL (SINGAPORE) PTE. LTD.
Direct Access International Financial Service Limited
Capital CSC Futures (Hong Kong) Limited
Bright International Futures Co., Ltd
Goldman Sachs International
GF Futures (Hong Kong) Limited
Jinrui Futures (Hong Kong) Limited



上海期货交易所
SHANGHAI FUTURES EXCHANGE

上海国际能源交易中心
SHANGHAI INTERNATIONAL ENERGY EXCHANGE