

2020

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

01

Timeline of milestone events
and data of Shanghai
crude oil futures

上海原油期货大事记

- 
- A vertical timeline with a red line and circular markers. The first marker at the top is filled, while the others are hollow. The dates are listed on the left, and the corresponding events are on the right.
- 2018.3.15** ● 上期能源完成香港**自动化交易服务（ATS）**注册。
 - 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。
 - 2018.10.11** ○ 发布做市商招募通知，10月19日公布做市商名单。
 - 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** ○ 境外开户数量突破100，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。
 - 2019.12.12** ○ 开户数量突破**10**万。
 - 2020.2.10** ○ 持仓量突破5万。
 - 2020.2.28** ○ 境外开户数量突破**200**，涵盖5大洲19个国家和地区。
 - 2020.3.11** ○ 日盘交易量突破**20**万，在亚洲时段交易量与WTI、Brent相当。
 - 2020.3.12** ○ 总持仓量突破**10**万。
 - 2020.3.25** ○ 境外中介数量达到**59**个。

To be continued……

■ 获奖情况 ■

- 1.2019年10月，上海市人民政府授予“中国原油期货上市”项目2018年度上海金融创新成果奖特等奖。
- 2.英国《期货与期权世界（Futures & Options World（FOW））》杂志，先后授予中国原油期货2018亚洲资本市场最佳新上市衍生品合约和2018国际能源和商品市场最具创新力新上市合约。

2018.3.15	●	INE completed the registration of Hong Kong Automated Trading Services (ATS).
2018.4.12	○	the daily trading volume exceeded 50,000.
2018.5.9	○	the daily trading volume exceeded 100,000.
2018.5.3	○	the open interests exceeded 10,000.
2018.6.20	○	the first ship of physically delivered crude oil futures was successfully unloaded to the designated delivery warehouse of the Dalian PetroChina International Storage and Transportation Co., Ltd.
2018.8.8	○	the daily trading volume exceeded 200,000.
2018.10.11	○	the market maker recruitment notice was released, and on October 19, the list of market makers was disclosed.
2018.11.15	○	INE was approved by Monetary Authority of Singapore as a Recognized Market Operator (RMO).
2019.3.26	○	crude oil price index was launched.
2019.6.24	○	the number of overseas accounts exceeded 100, covering 12 countries and regions across four continents.
2019.10.30	○	added Sinopec Hainan crude oil futures delivery and storage site, with an approved storage capacity of one million cubic meters and an initial usage of 400,000 cubic meters.
2019.12.12	○	the number of accounts exceeded 100,000.
2020.2.10	○	the open interests exceeded 50,000.
2020.2.28	○	the number of overseas accounts exceeded 200, covering 19 countries and regions across five continents.
2020.3.11	○	the daily trading volume exceeded 200,000, equivalent to that of WTI and Brent futures in Asian trading hours.
2020.3.12	○	the total open interests exceeded 100,000.
2020.3.25	○	the number of overseas intermediaries had reached 59.

To be continued.....

| Honors |

1. In October 2019, "The Launch of Shanghai's Crude Oil Futures" project won the Highest Prize of 2018 Shanghai Financial Innovation Award organized by the Shanghai Municipal People's Government.
2. Shanghai's Crude Oil Futures was awarded by the Futures & Options World (FOW) as "The Best New Derivatives Contract" of 2018 in Asia's capital markets and as "The Most Innovative New Contract" of 2018 in energy and commodity markets.

02

Shanghai Crude Oil Futures
Market Development Report

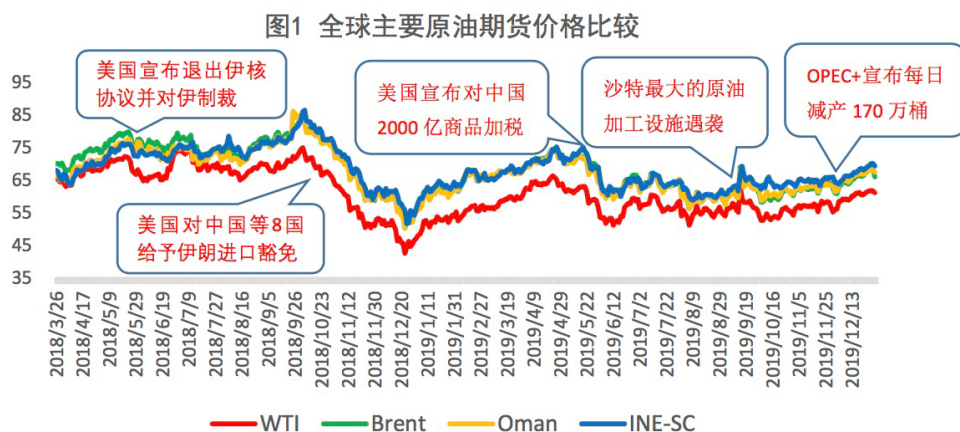
上海原油期货市场发展报告

上海原油期货市场发展报告

2018年3月26日，原油期货在上海国际能源交易中心上市，开启了中国期货市场国际化元年。两年以来，在市场各方大力支持和积极参与下，上海原油期货经受国内外各种地缘政治风险和极端事件考验，运行更加平稳；交易量、持仓量稳步上升，近月合约全面活跃，企业开展套保更加容易；实体企业、境外机构、金融机构参与日益加深，市场参与结构持续优化；交割平稳有序，与实体经济和现货贸易的联系更加紧密。

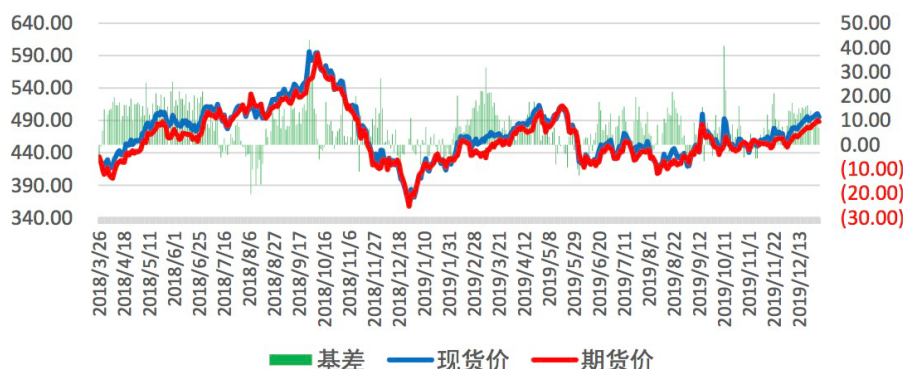
一、价格总体与国际油价保持高度联动，局部反映中国供需

2019年，在中美贸易摩擦、地缘政治频发的背景下，国际原油价格震荡上行。上海原油期货主力合约期初开盘376元/桶，年末收盘488.1元/桶，较2018年底收盘价379.1元/桶上涨27.5%。期间，最高531.7元/桶，最低366元/桶。与CME的WTI原油期货、ICE的Brent原油期货、DME的Oman原油期货价格保持高度联动，相关性分别为0.862、0.926、0.941。



期现价差方面，2019年，上海原油期货较理论现货价（Oman原油现货离岸价加运费、保险费等）期现价差最高12.61元/桶，最低-40.68元/桶，全年平均-6.45元/桶。期现价差变化客观反映了中国与其他地区供需关系的相对变化，有效引导了资源配置方向，保障了国家能源安全。

图2 上海原油期货期现基差



二、交易量、持仓量稳步上升，成为亚洲交易时段的风向标

2019年，上海原油期货交易量、持仓量较2018年均有所增长。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中，上海原油期货居14位，在原油期货品种中的市场规模仅次于WTI和Brent原油期货。

成交方面，全市场累计成交3464.44万手（单边，下同），累计成交金额15.48万亿元，日均成交14.2万手，日均成交金额634亿元，日均交易量同比增长1.2%。亚洲交易时段，前三行合约的交易量在多个交易日超过了Brent。持仓方面，2019年日均持仓量2.88万手，同比增长45.4%。

图3 原油期货每日成交量

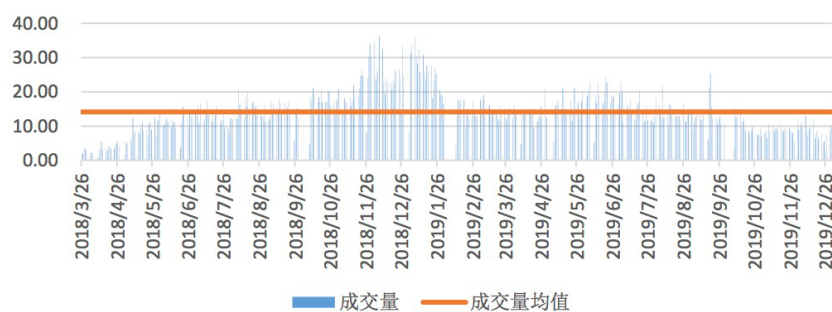
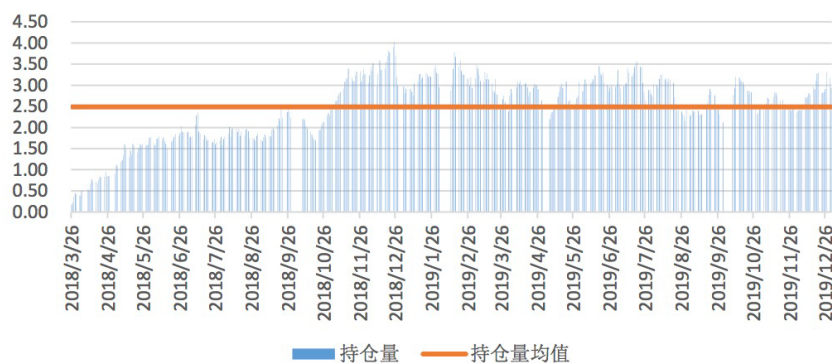


图4 原油期货每日持仓量



三、境外交易者、机构投资者参与度大幅增加，交易者结构持续优化

截至2019年底，共有已备案境外中介56家，较2018年新增11家，参与通道更加通畅。境外客户分布在五大洲19个国家和地区。境外客户日均交易量、日均持仓量同比分别增长106.5%和122.1%，占比分别达到15%和22%，反映境外交易者对中国原油期货的参与度不断提高。产业上中下游，生产、贸易、加工企业均有参与。全市场一般法人日均交易量、日均持仓量同比分别增长62.3%和54.4%，占比分别达到25%和30%，反映实体企业越来越多地利用原油期货管理价格风险。特殊法人日均交易量、日均持仓量同比分别增长29.7%和151.4%，占比分别达到10%和33%，反映金融机构更加重视原油期货在资产配置中的重要作用。

四、交割平稳有序，有效联接现货贸易市场

截至2019年底，上海原油期货交割仓库6家合计9个存放点，其中上海市1个，广东省1个，浙江省3个，山东省2个，辽宁省1个，海南省1个。2019年，上海原油期货交割总量17618手，折合1761.8万桶或241.34万吨，同比增加518.39%，交割金额合计78.56亿元。其中，6月交割量最高，共交割2812手，折合281.2万桶或38.52万吨。主力交割油种为巴士拉、阿曼，交割量占比分别为72.34%和13.44%。炼厂开始尝试参与交割，以调剂现货油种余缺，优化油种组合，提升炼油效益。

五、价格发现功能更加灵敏，风险管理功能日益凸显

价格发现方面，对市场基本面及突发事件的反映更加灵敏有效。在2019年10月中东至中国油轮运费大幅波动的情况下，上海原油期货及时有效反映了相关价格波动，为市场在对冲油价的同时，对冲了运费波动风险。在2019年10月伊朗油轮爆炸等亚洲时段事件中，上海原油期货率先启动行情，引领价格变化，价格发现快速高效。

风险管理方面，市场规模和结构更加有利于现货企业风险管理。2020年以来，新冠肺炎疫情在全球蔓延，OPEC+减产协议谈判失败，全球原油需求疲软而供应过剩，原油价格大幅下行且剧烈波动，现货企业面临巨大的经营压力。产业上下游企业积极利用上海原油期货进行套期保值，并通过参与交割拓宽贸易渠道，有效平抑了价格大幅波动对企业生产经营带来的风险。在此期间，上海原油期货持仓规模快速放大、屡创新高，最高持仓近12万手，较春节前最后一个交易日持仓2.7万手上升近3倍。随着市场持仓量稳步上升，近月合约全面活跃，企业实现套保策略更加容易，市场发展与企业参与形成良性互动。市场普遍反映，随着上海原油期货市场发展进一步成熟，越来越多投资者逐步接受国内原油期货价格。

结束语

2019年，上海国际能源交易中心紧紧围绕服务实体经济这根主线，通过优化交易者适当性制度、简化开户流程、优化做市机制、扩大境外白名单、发布原油指数、增设交割库等各项举措，不断提高交易便利性，优化市场运行效率，吸引了来自更多国家和地区的机构参与，帮助企业有效地进行管理风险。

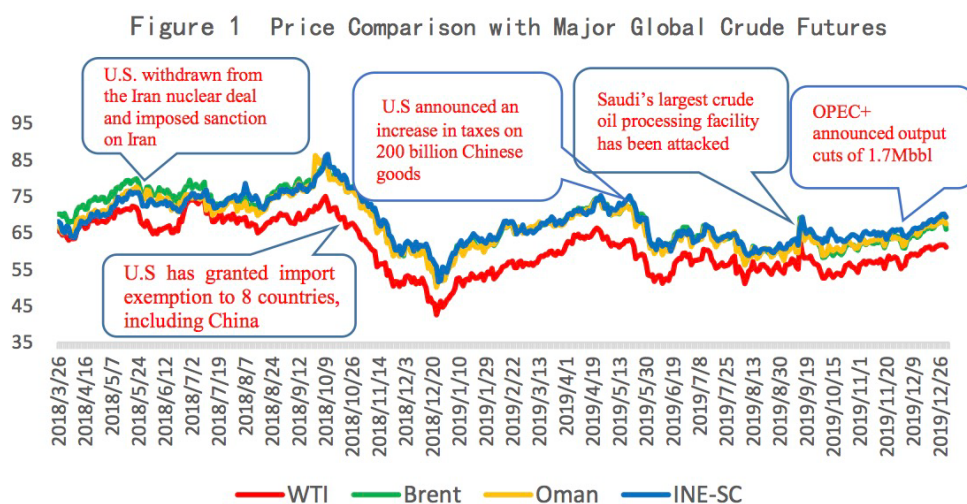
新的一年，我们将加快推出结算价交易机制（TAS）、稳步推进原油期货期权、推进保险公司和商业银行参与交易、推动上海价格在现货贸易中的使用。同时，我们将一如既往地持续完善规则制度，尽力降低交易成本，不断深化市场服务，为包括境内与境外、实体与金融、机构与个人在内的所有投资者提供更好的服务。

2020 | Shanghai Crude Oil Futures Market Development Report

On March 26, 2018, crude oil futures were listed on the Shanghai International Energy Exchange (INE), marking the first year of the internationalization of China's futures market. Over the past two years, with the strong support and active participation of all parties in the market, the Shanghai crude oil futures has stood the test of various geopolitical risks and extreme events in China and abroad and operates more smoothly than before. Trading volume and open interests are rising steadily, and front-month contracts are active throughout the trading hours, making it easier for enterprises to carry out hedging. More and more business entities, overseas institutions and financial institutions have participated in the trading, and the structure of market participation has been continuously improved. Delivery process is smooth and orderly, and is more closely linked to the real economy and spot trade.

1. Prices are highly correlated with international crude benchmark prices

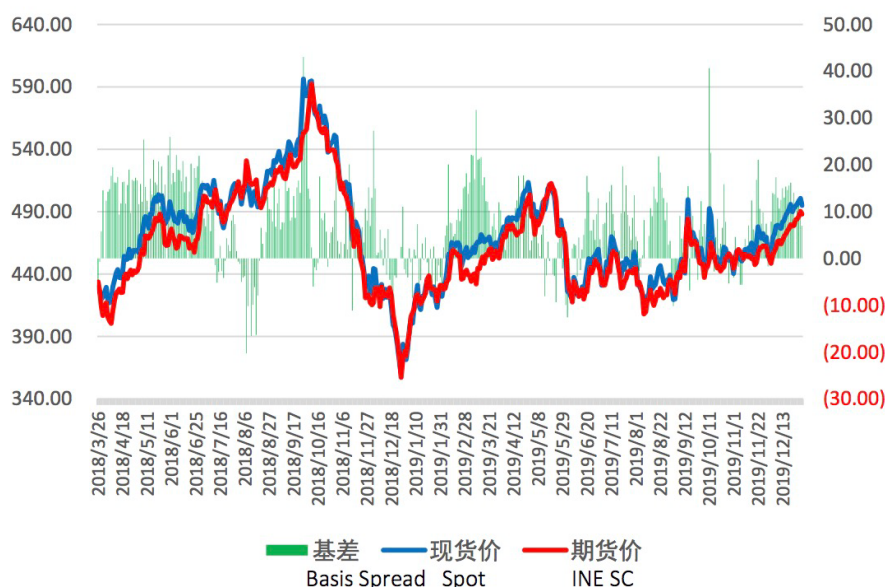
In 2019, against the backdrop of frequent international geopolitics conflicts and trade frictions between China and the U.S., the international crude oil price fluctuated and shown an upward trend. The dominant contract of Shanghai crude oil futures opened at 376 yuan/bbl at the beginning and closed at 488.1 yuan/bbl at the end of the year, up 27.5% from its closing price of 379.1 yuan/BBL at the end of 2018. During the period, the highest price was 531.7 yuan/barrel, and the lowest was 366 yuan/barrel. Shanghai crude oil futures is highly correlated with the prices of CME WTI crude futures, ICE Brent crude futures and DME Oman crude futures, with correlations of 0.862, 0.926 and 0.941, respectively.



With regard to the basis spread, in 2019, the spread between Shanghai crude oil futures and the theoretical spot price (Oman crude FOB price plus freight, insurance and etc.) reached as high as 12.61 yuan/BBL, and was

down as low as -40.68 yuan/BBL, and the annual average spread was -6.45 yuan/BBL. The fluctuation of basis spread objectively reflects the change of supply and demand relationship between China and other regions, effectively guides resource allocation and guarantees the national energy security.

Figure 2 INE SC V.S. Physical



2. Trading volume and open interests rise steadily, SC has become a benchmark in Asian trading hours

In 2019, the trading volume and open interests of Shanghai crude oil futures gradually increased compared with that of 2018. According to FIA (Futures Industry Association), the trading volume of Shanghai crude oil futures ranked 14th among the global energy futures and options products. The market size of Shanghai crude oil futures was only right after the WTI and Brent crude oil futures.

In terms of trading performance, the accumulated trading volume in the last year reached 34.64 million lots (one-side, the same as below) and the accumulated market turnover totaled 15.48 trillion yuan. The average daily trading volume was 142,000 lots, up 1.2% year on year, and average daily turnover was 63.4 billion yuan. During the Asian trading hours, trading volumes in the first three line contracts surpassed Brent futures in a number of trading days. Moreover, the average daily open interests in 2019 was 28,800 lots, up 45.4 % year on year.

Figure 3 SC Daily Trading Volume

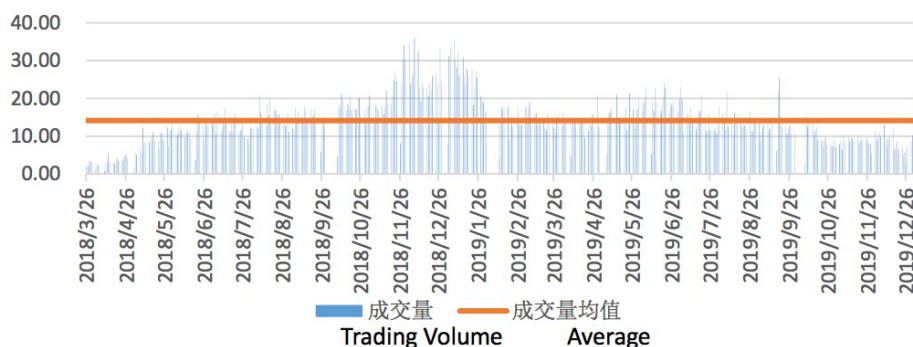
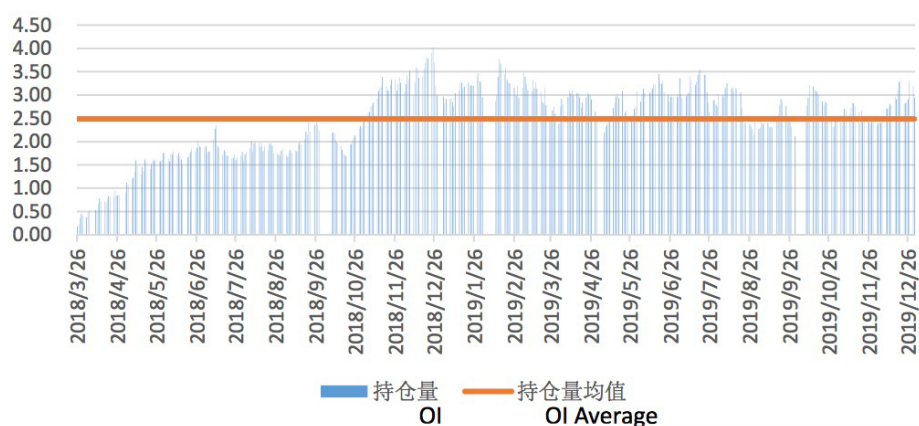


Figure 4 SC Daily OI



3. The proportion of overseas traders and institutional investors has increased significantly, and the structure of participants has been continuously improved

By the end of 2019, there were 56 overseas intermediaries registered, 11 more than in 2018, and the channels for participation were easier to get on board. Overseas clients were from 19 countries and regions across five continents. The average daily trading volume and daily open interest of overseas clients increased by 106.5% and 122.1% year on year respectively, accounting for 15% and 22% of the total, reflecting more active participation of overseas traders in China's crude oil futures. Upstream, middle and downstream industries, including producers, trading companies and manufacturing enterprises were all involved. The average daily trading volume and average daily open interest of general legal persons in the whole market increased by 62.3% and 54.4% year on year respectively, accounting for 25% and 30% of the total, proving that more physical enterprises were using crude oil futures to hedge price risks. The average daily trading volume and daily open interest of special legal persons increased by 29.7% and 151.4% year on year respectively, accounting for 10% and 33% of the total, demonstrating that financial institutions were paying more attention to the crucial role of crude oil futures in asset allocation.

4. Delivery process is stable and orderly, effectively connecting the spot market

By the end of 2019, there were six designated delivery warehouses and nine storage sites of Shanghai crude oil futures, including one in Shanghai, one in Guangdong, three in Zhejiang, two in Shandong, one in Liaoning and one in Hainan. In 2019, the total delivery volume of Shanghai crude oil futures was 17,618 lots, equivalent to 17.62 million barrels or 2.41 million tons, an increase of 518.39% on a year-on-year basis, with a total delivery amount of RMB 7.856 billion. Among them, the delivery volume in June was the highest, totaling 2,812 lots, equivalent to 2.812 million barrels or 385,200 tons. The main delivery oil types are Basrah and Oman, accounting for 72.34% and 13.44% respectively. Refineries began to participate in delivery to adjust the surplus and shortage of crude spot market, optimize crude composition and improve refining efficiency.

5. Price discovery function is more sensitive, and risk management function is increasingly prominent

In terms of price discovery, the response to market fundamentals and emergencies is more sensitive and effective. In October 2019, when the freight of Middle East to China tankers fluctuated significantly, Shanghai crude oil futures reflected the relevant price fluctuations in a timely and effective manner, providing an effective tool for hedging the risk of freight and oil price fluctuations. In October 2019, after the explosion of Iranian oil tanker in the Asian trading hours, Shanghai crude oil futures took the lead in the market, reflecting the market price fluctuation and showing an effective and efficient price discovery function.

In terms of risk management, market size and structure are more conducive to the risk management of spot

enterprises. Since 2020, the novel coronavirus pneumonia epidemic has been spreading all over the world. The negotiations on the OPEC+ reduction agreement failed, and the global crude oil demand is weak, resulting in an oversupply. Crude oil prices are down sharply and volatile, and spot enterprises are facing enormous operating pressure. The upstream and downstream enterprises of the industry have actively used Shanghai crude oil futures for hedging, and expanded trade channels by participating in delivery, effectively reducing the risk of large price fluctuations on enterprise production and operation. During this period, Shanghai crude oil futures open interests increased rapidly and reached new highs repeatedly, with the highest number of nearly 120,000 lots, almost three times higher than the open interests of 27,000 lots on the last trading day before the Spring Festival. With the steady increase of open interest and the overall activity of contracts in recent months, it is easier for enterprises to implement hedging strategies and form a positive interaction between market development and enterprise participation. The market generally reflects that more and more investors are gradually accepting the domestic crude oil futures price in a more matured futures market.

Conclusion

In 2019, Shanghai International Energy Exchange focused on the main task of serving the real economy, continuously improved trading convenience, optimized market operation efficiency by improving trader suitability system, simplifying account opening process, optimizing market making mechanism, expanding overseas white list, releasing crude oil index and adding delivery warehouses. It attracted institutions from more countries and regions to participate and to help enterprises effectively manage risks.

In the new year, we will accelerate the launch of the Trading at Settlement mechanism (TAS), steadily promote crude oil futures options, promote the participation of insurance companies and commercial banks in trading, and promote the use of Shanghai prices in spot trade. At the same time, we will continue to improve our rules and regulations, reduce transaction costs, and provide all-round market services for all investors, including domestic and overseas, physical and financial, institutions and individuals.

03

INE AWARDS

INE获奖名单

2019年度上海国际能源中心会员评优获奖名单

优秀会员奖

中信期货有限公司
银河期货有限公司
招商期货有限公司
上海东证期货有限公司
中银国际期货有限责任公司
永安期货股份有限公司
海通期货股份有限公司
兴证期货有限公司
方正中期期货有限公司
宏源期货有限公司
上海浙石期货经纪有限公司
新湖期货有限公司
华泰期货有限公司
南华期货股份有限公司
国投安信期货有限公司
浙商期货有限公司
广发期货有限公司
中粮期货有限公司
光大期货有限公司
建信期货有限责任公司

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

申万期货研究所（倪梦雪等）、华泰期货研究院（潘翔等）、中银国际投资咨询部（顾劲涛等）、方正中期投资咨询部（隋晓影等）、国投安信研究院（高明宇等）

优秀分析师奖

中信期货（桂晨曦）、海通期货（杨安）、东航期货（岳鹏）、东证期货（金晓）、浙商期货（汪文林）、光大期货（钟美燕）、宏源期货（詹建平）、建信期货（李捷）、国泰君安（王笑）、格林大华（王凯）

2019年INE原油期货交易量排名前三十会员名单

华泰期货有限公司
中信期货有限公司
国投安信有限公司
国信期货有限责任公司
东证期货有限公司
海通期货股份有限公司
中财期货有限公司
兴证期货有限公司
国泰君安有限公司
广州金控期货有限公司
徽商期货有限公司
申银万国期货有限公司
金瑞期货股份有限公司
银河期货有限公司
方正中期期货有限公司

中信建投有限公司
南华期货股份有限公司
招商期货有限公司
中辉期货有限公司
华安期货有限责任公司
西部期货有限公司
国富期货公司
上海大陆期货有限公司
兴业期货有限公司
瑞奇期货有限公司
浙商期货有限公司
广发期货有限公司
上海中期期货股份有限公司
宏源期货有限公司
永安期货股份有限公司

原油期货上市两周年 境外中介机构突出市场贡献奖获奖名单

星展银行（新加坡）
摩根大通证券（英国）
横华国际期货有限公司
时瑞金融服务有限公司
凯基证券（新加坡）
群益期货（香港）有限公司
元大期货（香港）有限公司
中国新永安期货有限公司
辉立期货
横华国际金融（新加坡）
直达国际金融服务有限公司
金瑞期货（香港）有限公司
法国兴业银行（英国）
交银国际证券有限公司
工银国际期货有限公司
磐石金融有限公司
中一期货有限公司
东航国际金融（香港）有限公司

List of 2019 INE Outstanding Member Awards

CITIC Futures Co., Ltd
Galaxy Futures Co., Ltd
China Merchants Futures Co., Ltd
Orient Futures Co., Ltd
BOC International Futures Co., Ltd
Yong'an Futures Co., Ltd
Haitong Futures Co., Ltd
Industrial Securities Futures Co., Ltd
Founder CIFCO Futures Co., Ltd
Hongyuan Futures Co., Ltd
Shanghai Zheshe futures Co., Ltd
Xinhu Futures Co., Ltd
Huatai Futures Co., Ltd
Nanhua Futures Co., Ltd
SDIC Essence Futures Co., Ltd
Zheshang Futures Co., Ltd
GF Futures Co., Ltd
COFCO Futures Co., Ltd
Everbright Futures Co., Ltd
CCB Futures Co., Ltd

List of Excellent Team/Analyst Awards

Excellent Industrial Service Team Award

Shenyin & Wanguo Futures Research Institute (Ni Mengxue, et al.), Huatai Futures Research Institute (Pan Xiang, et al.), Bank of China International Investment Consulting Department (Gu Jingtao, et al.), Founder CIFCO Futures Investment Consulting Department (Sui Xiaoying, et al.), SDIC Essence Futures Research Institute (Gao Mingyu, et al.)

Excellent Analyst Award

CITIC Futures (Gui Chenxi), Haitong Futures (Yang'an), China Eastern Airlines Futures (Yue Peng), Orient Futures (Jin xiao), Zhejiang Merchants Futures (Wang Wenlin), Everbright Futures (Zhong Meiyang), Hongyuan Futures (Zhan Jianping), CCB Futures (Li Jie), Guotai Junan Futures(Wang Xiao), and Gelin Dahua Futures(Wang Kai)

List of 2019 INE Crude Oil Futures Trading Volume Top 30 Members List

Huatai Futures Co., Ltd	China Securities Futures Co., Ltd
CITIC Futures Co., Ltd	Nanhua Futures Co., Ltd
SDIC Essence Futures Co., Ltd	China Merchants Futures Co., Ltd
Guosen Futures Co., Ltd	Zhonghui Futures Co., Ltd
Orient Futures Co., Ltd	Huaan Futures Co., Ltd
Haitong Futures Co., Ltd	Western Futures Co., Ltd
Zhongcai Futures Co., Ltd	Guofu Futures Co., Ltd
Industrial Securities Futures Co., Ltd	Dalu Futures Co., Ltd
Guotai Junan Futures Co., Ltd	Industrial Futures Co., Ltd
Guangzhou Finance Holding Futures Co., Ltd.	Jiangxi Rich Futures Co., Ltd
Huishang Futures Co., Ltd	Zheshang Futures Co., Ltd
Shenyin & Wanguo Futures Co., Ltd	GF Futures Co., Ltd
Jinrui Futures Co., Ltd	SHZQ Futures Co., Ltd
Galaxy Futures Co., Ltd	Hongyuan Futures Co., Ltd
Founder CIFCO Futures Co., Ltd	Yongan Futures Co., Ltd

List of Overseas Intermediary Outstanding Market Contribution Awards

DBS Bank Ltd.
J.P. Morgan Securities plc
HGNH International Futures Co., Limited
Straits Financial Services Pte Ltd
KGI SECURITIES (SINGAPORE) PTE. LTD.
CSC Futures (HK) Limited
Yuanta Futures (HK) Co., Limited
China Xin Yongan Futures Company Limited
Phillip Futures Pte Ltd
HGNH INTERNATIONAL FINANCIAL (SINGAPORE) PTE. LTD.
DA International Financial Service Limited
Jinrui Futures (Hong Kong) Limited
Societe Generale International Limited
BOCOM International Securities Limited
ICBC International Futures Limited
BANDS Financial Limited
CN First International Futures Limited
CES Capital International (Hong Kong) Co., 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