

2023

上海天然橡胶期货 衍生品市场发展报告

Development Report of the Shanghai Natural
Rubber Futures and Derivatives Markets

不忘初心三十载 凝心聚力新征程

Staying True to Original Aspiration during 30-Year Development and Forging Ahead with Concerted Efforts



上海期货交易所
SHANGHAI FUTURES EXCHANGE

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

天然橡胶与石油、钢铁、煤炭并称为世界四大工业原料，是国防和工业建设不可缺少的重要战略资源。根据亚洲天然橡胶生产国协会（ANRPC）统计，2022年，全球天然橡胶产量为1434.4万吨，同比增长1.90%；消费量为1,480.2万吨，同比增长1.90%。中国是世界天然橡胶最大的消费国和进口国，消费量超过世界总量的三分之一。2022年，中国天然橡胶消费量为593万吨，占全球天然橡胶消费量的40%；产量为86万吨，占全球天然橡胶产量的6%，其中20号胶产量约为11万吨。

1993年3月，天然橡胶期货在上海上市。在中国证监会坚强领导和市场各方的大力支持下，历经30年发展，上海期货交易所（以下简称上期所）已构建“一主两翼”、连通境内外的中国特色现代天然橡胶期货衍生品体系，功能有效发挥，在维护经济发展大局稳定、服务国家“一带一路”倡议、加快构建新发展格局等方面贡献积极力量。

Natural rubber, oil, steel, and coal are four major industrial raw materials and important strategic resources indispensable for national defense and industry development across the world. According to the statistics of the Association of Natural Rubber Producing Countries (ANRPC), in 2022, the global natural rubber output was up 1.90% year-on-year to 14,344,000 metric tons, and the consumption rose by 1.90% year-on-year to 14,802,000 metric tons. China, the world's largest natural rubber consumer and importer, consumes over one-third of the world's total. In 2022, China posted 5,930,000 metric tons of natural rubber consumption, or 40% of the global consumption, and 860,000 metric tons of production, or 6% of the world's output, including 110,000 metric tons of TSR20.

In March 1993, the natural rubber futures was listed in Shanghai. Under the leadership of the China Securities Regulatory Commission (CSRC) and with vigorous support from all market participants, the Shanghai Futures Exchange (SHFE) has established a modern natural rubber futures and derivatives system with Chinese characteristics after 30 years of development. This system features the futures products as the mainstay and the derivatives and a well-developed standard warrant trading platform as two supporting lines, and connects the domestic and overseas markets. Functioning effectively, this system has played a positive role in the stable development of China's economy, in serving the Belt & Road Initiative, and in the formation of a new development paradigm.

01 Milestones
发展大事记

02 Performance
of Natural Rubber Futures
and Derivatives Markets
运行情况

03 Honors and Awards
获奖情况

04 Statistics
统计数据

01

Milestones

发展大事记

天然橡胶期货“一主两翼”建设发展大事记

- 1993.03.27 ● 天然橡胶期货上市。
- 2011.07.26 ○ 天然橡胶期货合约交易单位由 5 吨 / 手调整为 10 吨 / 手,自 RU1208 合约开始执行。自 2012 年 7 月 23 日起,天然橡胶期货标准仓单面值由 5 吨 / 张调整为 10 吨 / 张。
- 2011.08 ○ 截至 2011 年 8 月,海南天然橡胶产业集团股份有限公司、云南天然橡胶产业集团有限公司、广东省广垦橡胶集团有限公司、中化国际(控股)股份有限公司等四家国内头部天然橡胶生产企业均参与期货市场。
- 2011.11 ○ 上期所加入中国天然橡胶协会成为副会长单位。
- 2012.05 ○ 上期所加入中国橡胶工业协会担任主席团成员单位。
- 2014.12.26 ○ 天然橡胶期货连续交易正式上线。
- 2017 ○ 天然橡胶“保险 + 期货”精准扶贫试点工作启动。
- 2019 ○ 天然橡胶场外期权产业扶持试点项目推出。
- 2019.01.28 ○ 天然橡胶期权上市,引入首批 6 家做市商。
- 2019.05.27 ○ 上期综合业务平台(原上期标准仓单交易平台)上线天然橡胶标准仓单交易。
- 2019.08.12 ○ 天然橡胶期货国际化品种 20 号胶期货上市。
- 2020.06.26 ○ 天然橡胶期货引入 14 家做市商,合约连续性提升。
- 2020.10.30 ○ 上期所天然橡胶期货成交量创历史新高,达 227.82 万手(单边,下同),成交金额 3633.29 亿元。
- 2020.12.09 ○ 上期综合业务平台(原上期标准仓单交易平台)上线天然橡胶延伸仓单交易。
- 2021.08.27 ○ 上期综合业务平台(原上期标准仓单交易平台)天然橡胶延伸仓单质押业务顺利落地。
- 2022 ○ 天然橡胶场外期权产业扶持试点项目更名为“期权稳产行动”。
- 2022.08.12 ○ 上期所与中国天然橡胶协会在绿色橡胶产业网联合推出“期现手牵手 乡村振兴路”专栏。
- 2023.03.13 ○ 上期所天然橡胶期货持仓量创历史新高,达 41.77 万手。

待续……

天然橡胶期货国际化发展大事记

- 2019.01.25 ● 《国务院关于促进综合保税区高水平开放高质量发展的若干意见》(国发[2019]3号)发布,提出“支持具备条件的综合保税区开展铁矿石、天然橡胶等商品期货保税交割业务”。
- 2019.07.03 ○ 中国证监会发布《关于同意上海国际能源交易中心开展20号胶期货交易的批复》,20号胶期货确定为境内特定品种。
- 2019.07.22 ○ 海关总署发布《关于开展天然橡胶期货保税交割业务的公告》(海关总署公告2019年第121号)。
- 2019.08.12 ○ 天然橡胶期货国际化品种20号胶期货上市。
- 2019.08.21 ○ 20号胶期货上市仅8个交易日,成交金额累计超过百亿元。
- 2019.09.26 ○ 20号胶期货引入15家做市商,合约连续性大幅提升。
- 2019.12.04 ○ 首批20号胶期货保税标准仓单共201.6吨经中国检验认证集团山东有限公司质检合格后在中国(山东)自贸试验区青岛片区的青岛港国际物流有限公司保税交割库正式生成。该批20号胶由泰国联润橡胶有限公司(Southland Resources Co.,Ltd)BJ2工厂生产。
- 2020.01.23 ○ 首批国产20号胶期货保税标准仓单共201.6吨在海南自由贸易港海口综合保税区海南农垦现代物产集团有限公司保税交割库正式生成,实现了国产产品参与保税期货市场零的突破。该批20号胶由海南天然橡胶产业集团股份有限公司生产。
- 2020.02.18 ○ 财政部和税务总局联合发布《关于支持货物期货市场对外开放增值税政策的公告》,以支持货物期货市场对外开放。
- 2020.05 ○ 成功开展保税交割20号胶的转关区调拨,实现保税期货与现货市场的有机衔接。
- 2020.10.15 ○ 与日本交易所合作举办线上“中日衍生品市场研讨会”,开展天然橡胶期货国际市场推广,来自日本、新加坡、泰国、马来西亚等国家地区的境内外投资者700余人参加会议。
- 2020.10.29 ○ 境内外天然橡胶产业链代表企业泰国泰华树胶、泰国联润橡胶、赛轮轮胎、青岛森麒麟轮胎、永安资本和浙期实业等,签署采用INE20号胶期货价格作为现货贸易定价基准的合作备忘录。
- 2020.11.17 ○ 与新加坡交易所合作举办线上“中新橡胶市场研讨会”,开展天然橡胶期货国际市场推广,来自新加坡、日本、泰国、马来西亚、斯里兰卡、澳大利亚等国家和中国台湾地区的境内外投资者900余人参加会议。
- 2021.02.22 ○ 成功开展首笔保税交割20号胶通过中欧班列复运出境,实现价格与交割货物向欧洲市场辐射。

- 2021.06.08 ○ 与国际橡胶研究组织（IRSG）合作举办线上 2021 世界橡胶峰会，开展天然橡胶期货国际市场推广，全球天然橡胶各主要生产国相关政府部门和行业协会、生产企业、贸易企业、国际轮胎企业、金融机构、科研院所等参加会议。
- 2021.08 ○ 广东省广垦橡胶集团有限公司首度采用 INE 20 号胶期货价格作为长协跨境贸易的定价基准。
- 2021.12 ○ 上期强源助企项目（服务类定价基准）20 号胶期货“丰羽行动”试点项目启动。
- 2021.12.07 ○ 来自境内外天然橡胶产业上中下游 15 家头部企业签署 20 号胶贸易定价期现合作备忘录，将在 20 号胶的采购与供应中采用 INE20 号胶期货价格作为国内和跨境贸易定价基准。
- 2022.05 ○ 与国际橡胶研究组织（IRSG）合作举办 2022 世界橡胶峰会。
- 2022.07 ○ 以 INE 20 号胶期货作为定价基准的挂钩实货量显著提升。采用 INE 20 号胶期货价格作为定价基准的实货跨境贸易量近 140 万吨，货值逾 150 亿人民币，约占我国天然橡胶进口量的 26%。
- 2022.07.13 ○ INE 20 号胶期货成交量创历史新高，达 11.99 万手，成交金额 128.81 亿元。
- 2022.12.15 ○ 上期综合业务平台上线 20 号胶保税标准仓单交易。
- 2023.03.07 ○ INE 20 号胶期货持仓量创历史新高，达 11.82 万手。
- 待续……

Construction of a multi-dimensional product structure for natural rubber

- 1993.03.27 ● The natural rubber futures was listed for trading.
- 2011.07.26 ○ The trading unit of natural rubber futures contracts was adjusted from 5 metric tons per lot to 10 metric tons per lot, executed from the contract of RU1208. The unit of natural rubber futures standard warrant was adjusted from 5 metric tons to 10 metric tons since July 23rd, 2012.
- 2011.08 ○ By the end of August, 2011, four leading domestic natural rubber producers, namely China Hainan Rubber Industry Group Co., Ltd., Yunnan Natural Rubber Industry Group Co., Ltd., Guangdong Guangken Rubber Group Co., Ltd., and Sinochem International Corporation, had all traded in the futures market.
- 2011.11 ○ SHFE joined the China Natural Rubber Association (CNRA) as the vice president.
- 2012.05 ○ SHFE joined the China Rubber Industry Association (CRIA) as a Presidium member.
- 2014.12.26 ○ Continuous trading was formally extended to natural rubber futures.
- 2017 ○ SHFE launched the Natural Rubber “Insurance + Futures” Targeted Poverty Alleviation Project on a pilot basis.
- 2019 ○ The pilot program of industry support through OTC natural rubber options was introduced.
- 2019.01.28 ○ Natural rubber options were listed, while introducing 6 market makers in the first round.
- 2019.05.27 ○ Natural rubber standard warrants were listed for trading on the SHFE OTC Platform (formerly SHFE Standard Warrant Trading Platform).
- 2019.08.12 ○ TSR20 futures, a natural rubber futures product fully accessible to overseas investors, was listed for trading on INE.
- 2020.06.26 ○ A total of 14 market makers were introduced for natural rubber futures, greatly improving the continuity of the trading contracts.
- 2020.10.30 ○ The SHFE natural rubber futures posted the record single-day trading volume of 2,278,200 lots (counted as one-sided, the same below) and the turnover of RMB 363.329 billion.
- 2020.12.09 ○ Extended natural rubber warrants were listed for trading on the SHFE OTC Platform (formerly SHFE Standard Warrant Trading Platform).
- 2021.08.27 ○ The SHFE OTC Platform (formerly SHFE Standard Warrant Trading Platform) rolled out the service of pledge with extended natural rubber warrants.
- 2022 ○ The name of the pilot program of industry support through OTC natural rubber options was changed into “Secure-Production-Through-Options Campaign” .
- 2022.08.12 ○ SHFE and CNRA jointly ran a column titled “Futures and Spot Markets Working Hand in Hand for Rural Revitalization” on cnraw.org.cn.
- 2023.03.13 ○ The SHFE natural rubber futures posted the record single-day open interest of 417,700 lots.

To be continued.....

The internationalization of the Shanghai Natural Rubber Futures

- 2019.01.25 ● Several Opinions of the State Council on Boosting the High-level Opening-up and High-quality Development of the Comprehensive Bonded Zones (No. 3 [2019] of the State Council) was released, proposing “to support the bonded delivery of iron ore, natural rubber and other commodity futures in qualified comprehensive bonded zones” .
- 2019.07.03 ○ The China Securities Regulatory Commission (CSRC) issued the Approval for the Listing and Trading of TSR20 Futures on the Shanghai International Energy Exchange, and identified TSR20 futures as a specified domestic futures product (i.e. an international product accessible to overseas investors).
- 2019.07.22 ○ The General Administration of Customs (GAC) issued the Announcement on the Provision of Bonded Delivery Services for Natural Rubber Futures (GAC Announcement No. 121 [2019]).
- 2019.08.12 ○ TSR20 futures, a natural rubber futures product fully accessible to overseas investors, was listed for trading on INE.
- 2019.08.21 ○ In merely eight trading days after the listing of TSR20 futures, the cumulative turnover of TSR20 futures exceeded RMB 10 billion yuan.
- 2019.09.26 ○ A total of 15 market makers were introduced for TSR20 futures, greatly improving the continuity of the trading contracts.
- 2019.12.04 ○ TSR 20 futures’ first batch of bonded standard warrants totaling 201.6 MT were verified by CCIC Shandong and officially generated at the bonded delivery storage facility of Qingdao Port International Logistics Co., Ltd. in the Qingdao Area of China (Shandong) Pilot Free Trade Zone. The underlying commodities of these standard warrants were produced by the BJ2 factory of Southland Resources Co., Ltd.
- 2020.1.23 ○ The first batch of bonded standard warrants for domestic TSR20 totaling 201.6 MT were officially generated at the bonded delivery storage facility of HSF Modern Logistics Group Co., Ltd. in Haikou Comprehensive Bonded Area in Hainan Free Trade Port. It was the first time that domestic products participated in the bonded futures market. The underlying commodities of these standard warrants were produced by Hainan Natural Rubber Industry Group Co., Ltd.
- 2020.02.18 ○ The Ministry of Finance and the State Taxation Administration jointly issued the Announcement on VAT Policies for Supporting the Opening-up of Commodity Futures Markets, with a view to encouraging the opening-up of the commodity futures markets.
- 2020.05 ○ INE successfully carried out the transfer of TSR20 commodities to a different customs district after bonded delivery, helping connecting the bonded futures market to the spot market.
- 2020.10.15 ○ INE and the Japan Exchange Group (JPX) co-hosted an online “China-Japan Derivatives Market Seminar” to promote the natural rubber futures in the global market. The event was attended by more than 700 domestic and overseas investors from Japan, Singapore, Thailand, Malaysia and other countries and regions.
- 2020.10.29 ○ Leading enterprises of the natural rubber industry at home and abroad, such as Thai Hua Rubber (Public) Company Ltd., Southland Resources Co., Ltd., Sailun Group Co., Ltd., Qingdao Sentury Tire Co, Ltd., Zhejiang Yongan Capital Management Co., Ltd. and Zhejiang Zheqi Industrial Co., Ltd. signed an MOU to adopt the price of INE TSR20 futures as the pricing benchmark for spot trade.

- 2020.11.17 ○ INE and Singapore Exchange (SGX) co-organized the online “INE & SGX Rubber Market Seminar” to promote the natural rubber futures in the global market. The event was attended by over 900 domestic and overseas investors from countries and regions such as Singapore, Japan, Thailand, Malaysia, Sri Lanka, Australia, and Chinese Taipei.
- 2021.02.22 ○ Bonded delivered TSR 20 commodities were successfully exported through the China-Europe Express Train, which extended both the price and delivered commodities to the European market.
- 2021.06.08 ○ INE cooperated with the International Rubber Study Group (IRSG) to hold the online World Rubber Summit 2021 for the overseas marketing of natural rubber futures. This event was attended by relevant government departments, industry associations, producers, trading companies, international tyre enterprises, financial institutions, and research institutes of major global natural rubber producing countries and regions.
- 2021.08 ○ Guangdong Guangken Rubber Group Co., Ltd. became the first company to price long-term contracts of cross-border rubber trades based on the INE TSR20 futures price.
- 2021.12 ○ SHFE kicked off the pilot “Empowering Mission” for TSR20 futures, a program (service pricing benchmark) aimed to support rubber production and aid enterprises.
- 2021.12.07 ○ Fifteen leading domestic and overseas companies in the natural rubber industry signed the MOU for cooperation between futures and spot markets, agreeing to reference the INE TSR20 futures price in domestic and cross-border purchase and supply of TSR20.
- 2022.05 ○ INE co-hosted the online World Rubber Summit 2022 with the International Rubber Study Group (IRSG).
- 2022.07 ○ Physical trade of natural rubber that references INE TSR20 futures price has grown significantly in volume, to close to 1,400,000 metric tons, amounting to over RMB 15 billion and representing 26% of China’s natural rubber import volume.
- 2022.07.13 ○ INE’s TSR20 futures registered the record single-day trading volume of 119,900 lots and the turnover of RMB 12.881 billion.
- 2022.12.15 ○ Bonded TSR20 standard warrants were listed for trading on the SHFE OTC Platform.
- 2023.03.07 ○ INE’s TSR20 futures registered the record single-day open interest of 118,200 lots.

To be continued……

02

Performance
of Natural Rubber Futures
and Derivatives Markets

运行情况

运行情况

在中国证监会的坚强领导和市场各方的大力支持与积极参与下，天然橡胶期货衍生品在发现价格、管理风险、配置资源三大功能上发挥了独特而积极的作用。上市以来，天然橡胶期货衍生品总体呈现“交易平稳、结算流畅、交割顺利、风险可控”的良好态势，市场规模全球领先。

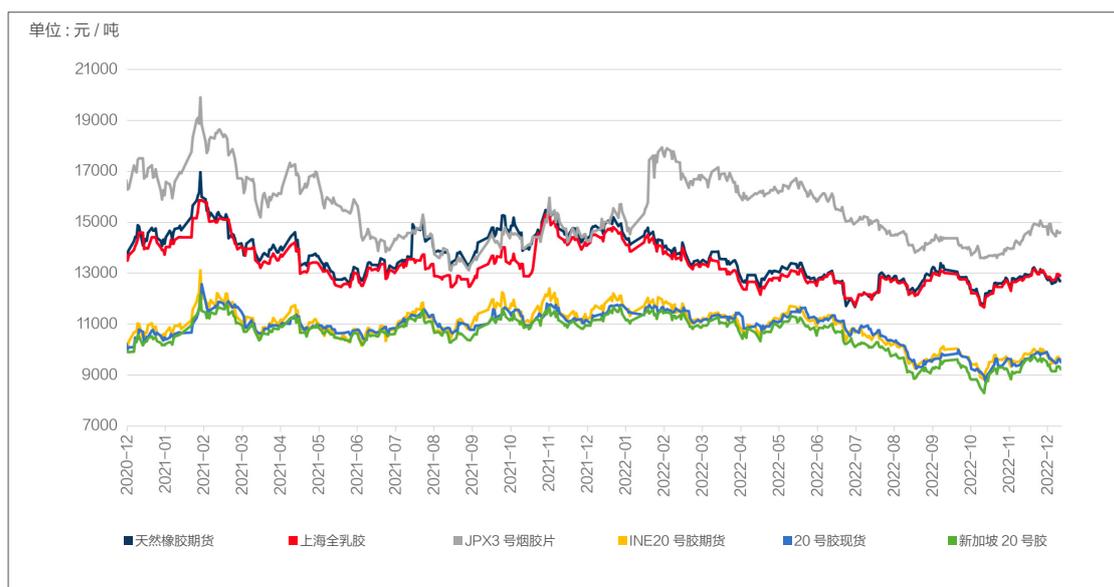
（一）价格发现功能充分发挥，有效反映供需变化，对境外市场引领性增强，国际定价影响力显著提升

天然橡胶期货是中国期货市场运行历史最为悠久的品种之一，经过 30 年的发展，价格发现功能充分发挥，已成为天然橡胶国内贸易的定价基准，为国家相关部委、协会的相关决策提供参考依据。

天然橡胶期货国际化品种 20 号胶期货采用“净价交易、保税交割、国际平台、人民币计价”的交易模式，上市近 4 年，价格发现功能发挥良好，正逐渐成为我国天然橡胶跨境贸易的定价基准。2022 年，境内外天然橡胶产业链头部企业以 20 号胶期货作为天然橡胶跨境贸易定价基准所挂钩的实货贸易量近 140 万吨，货值逾 150 亿元，约占我国天然橡胶进口量近三成。

近年来，天然橡胶、20 号胶期货与现货价格相关系数在 0.9 以上，有效反映了境内外天然橡胶的供需变化。

天然橡胶、20 号胶期货和现货价格走势



（二）市场规模全球领先，服务实体经济功能持续增强

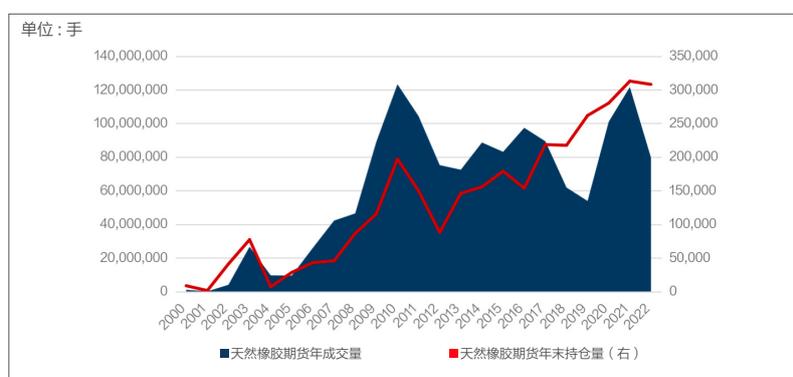
2022 年，上期所天然橡胶期货累计成交 7963.94 万手，成交金额 10.44 万亿元，日均持

仓 30.98 万手，在期货业协会（FIA）统计的全球农产品衍生品合约中排名第 10 位，在全球同类品种中持续居首位。

20 号胶期货自上市以来，成交量和持仓量持续增长，市场规模已超越全球同类品种。2022 年，上期能源 20 号胶期货累计成交 1,359.17 万手，同比增长 78.90%，成交金额 14,365.44 亿元，同比增长 67.27%；日均持仓 8.19 万手，同比增长 77.27%。在全球农产品衍生品合约中排名第 33 位。

天然橡胶期货、20 号胶期货为投资者提供了有效的风险管理工具，以规避橡胶价格波动等因素带来的经营风险。新冠疫情防控期间，橡胶企业面对采销受困、现金流承压、现货价格波动等情况下，规范运用期货工具，有效规避了价格风险。上期所持续调整天然橡胶期货衍生品交割手续费，切实降低了企业参与期货交割的成本，稳定了企业经营业绩，助力实现保供稳价。

上期所天然橡胶期货年成交量、年末持仓量统计图（2000-2022）



注：（1）交易量、持仓量均单边计算 （2）1208 合约之后，天然橡胶期货合约交易单位由 5 吨/手调整为 10 吨/手

上期能源 20 号胶期货成交量、持仓量统计图（2019.8-2022.12）



注：交易量、持仓量均为单边计算

（三）机构投资者参与度高，市场结构持续优化

交易者结构方面，天然橡胶期货和 20 号胶期货法人机构参与度较高，套期保值交易量较大，投资者结构不断优化。2022 年，天然橡胶期货法人持仓占比增长 12.51%，法人客户交易占比增长 25.04%；20 号胶期货法人持仓占比增长 5.44%，法人客户交易占比增长 31.04%。其中，20 号胶期货的境外客户主要来自新加坡、泰国和中国香港，并广泛参与到 20 号胶期货的交易和交割当中。

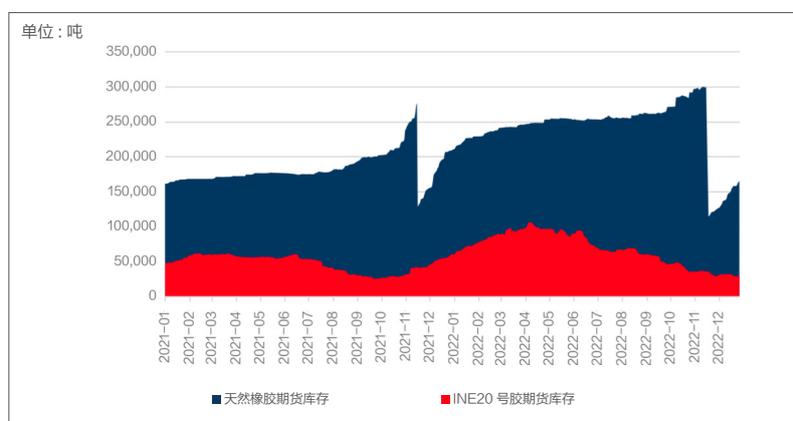
（四）交割服务持续优化，期货库存、交割规模稳定，有效发挥资源配置功能

根据市场的发展需求，天然橡胶期货交割仓库布局与库容、可交割商品持续优化。一是总体库容持续提升，从1999年的近5万吨扩增至2022年的69.1万吨。二是交割仓库布局持续优化，在传统消费与生产区域上海、山东、云南、海南的基础上扩充至消费区域天津。三是加强在消费区域布局，青岛、上海地区的库容从1999年的3.52万吨扩增至2022年的22万吨。四是可交割资源不断扩充升级，截至2022年底，上期所天然橡胶期货可交割商品合计8个注册品牌41家工厂。

天然橡胶期货库存与交割均具备稳定规模。近10年，天然橡胶期货仓单稳定在10万吨以上，平均年交割量约19万吨。截至2022年12月30日，天然橡胶期货库存为16.5万吨，其中山东、上海、天津、云南和海南分别占比49.49%、19.54%、6.55%、21.57%和2.85%。2022年，天然橡胶期货累计交割14.61万吨，同比增长28.59%。

20号胶期货指定交割仓库启用库容30.5万吨，分布于上海、山东和海南。上期能源20号胶期货可交割商品合计25家企业37家工厂；其中，中国4家、泰国16家、马来西亚2家、印度尼西亚3家。截至2022年12月30日，20号胶期货库存为29213吨，其中山东、海南和上海分别占比92.75%、7.81%和0%。2022年，20号胶期货累计交割15.76万吨，同比增长65.50%。

上期所天然橡胶、20号胶期货库存量统计图



（五）天然橡胶期权上市有效服务企业多元化风险管理需求

作为国际上首个以天然橡胶期货为标的的期权产品，天然橡胶期权的上市丰富了我国期货市场天然橡胶产品系列，有助于满足实体企业多元化、精细化、个性化的风险管理需求。

自2019年上市以来，天然橡胶期权市场运行总体平稳，成交持仓规模稳步上升，投资者积极参与，风险管理功能发挥良好。2022年，天然橡胶期权累计成交535.04万手；日均成交2.21万手，日均持仓6.49万手，同比分别上涨12.63%和20.44%。

（六）上期综合业务平台助力打通金融服务实体经济的最后一公里

为实现更深层次服务实体经济，上期所设立上期综合业务平台（原上期标准仓单交易平台），开展与期货交易相关的标准仓单与场外衍生品业务。2019年5月27日，天然橡胶标准仓单交

易上线；2020年12月9日，天然橡胶延伸仓单交易上线；2022年12月15日，20号胶保税标准仓单交易上线。上期综合业务平台满足了实体企业多样化的金融需求，实现天天交易、日日交割，对于促进天然橡胶品种的期现结合、场内场外协同、境内境外连通具有重要意义。

2022年，天然橡胶标准仓单成交532笔，共计27371张仓单，合计27.97万吨，成交金额34.98亿元；天然橡胶延伸仓单成交11笔，共计622张仓单，合计0.62万吨，成交金额0.8亿元；20号胶标准仓单成交8笔，共计91张仓单，合计0.09万吨，成交金额0.09亿元。

（七）精准扶持市场主体 打造高能级产业服务

自脱贫攻坚战打响以来，上期所认真贯彻落实党中央、中国证监会关于扶贫工作的重要部署，全力探索深化具有期货行业特色的扶贫长效机制，开展“保险+期货”、“期权稳产行动”以及“服务三农”系列培训，实现天然橡胶精准扶贫与乡村振兴有机衔接。

2017-2022年，上期所连续六年开展天然橡胶“保险+期货”试点工作，累计投入资金近5.8亿元，保障天然橡胶现货产量近68万吨，覆盖云南、海南31个市县，近64万户次的胶农受益，累计赔付金额约4.4亿元。2022年，上期所开展“保险+期货”项目覆盖21个县市，保障现货17.25万吨，惠及胶农17万户，平均赔付率约90%，赔付金额1.2亿元，赔付率和赔付金额均创历史新高；“期权稳产行动”项目覆盖现货4.3万吨，产生收益2890万元，平均兑付率93%。

Performance of Natural Rubber Futures and Derivatives Markets

Under the leadership of the China Securities Regulatory Commission (CSRC) and with vigorous support from all market participants, natural rubber futures and derivatives have played a distinct and positive role in price discovery, risk management, and resource allocation. Since their listing, the natural rubber futures and derivatives market has been trading stably, with smooth settlement, successful delivery, and controllable risks and grown a sizable market among the global markets.

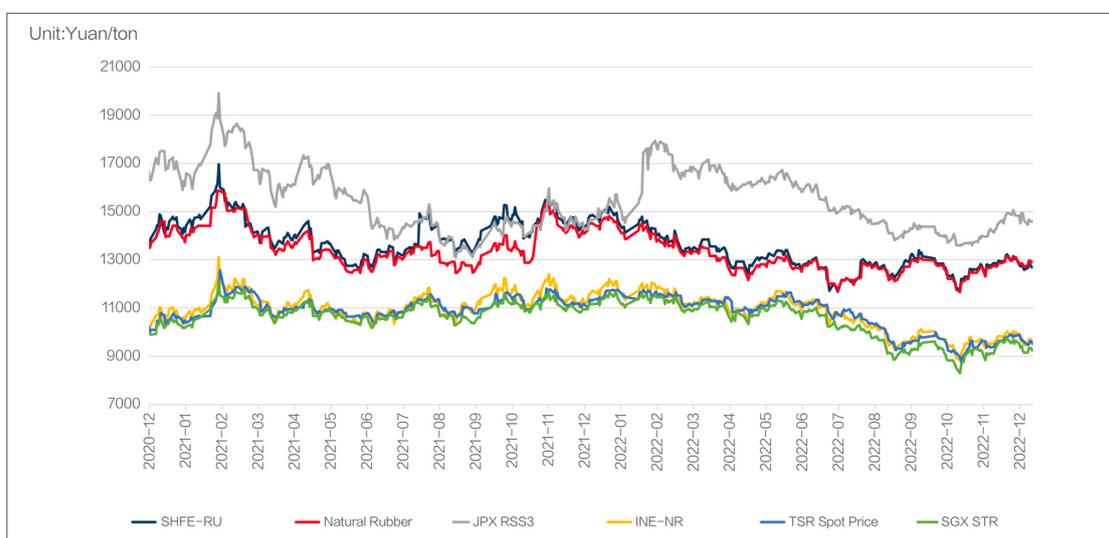
(I) Fully-functional price discovery to effectively reflect the supply-demand dynamics and increasing pricing influence

Natural rubber (RU) futures is one of the earliest products listed in China's futures market. After three decades of development, RU futures has played a pronounced role in price discovery, and served as a pricing benchmark for domestic natural rubber trades and the reference for relevant government authorities and industry associations to make informed decisions.

TSR20 futures, a natural rubber futures product open to overseas investors, is traded on the basis of “net pricing, bonded delivery, international platform, and RMB denomination” . Listed some four years ago, TSR20 futures has properly fulfilled its role in price discovery and progressively served as a pricing benchmark for China’ s cross-border natural rubber trades. In 2022, the leading natural rubber enterprises at home and abroad concluded physical cross-border trades of nearly 1.4 million metric tons or more than RMB 15 billion worth of natural rubber, with the price benchmarked against TSR20 futures and the trading volume representing around 30% of China’ s natural rubber import.

In recent years, the correlation between the natural rubber futures, TSR20 futures and spot prices has been above 0.9, indicating the dynamics of the domestic natural rubber supply and demand.

Price Movement of RU Futures, TSR20 Futures, and TSR20 Spot



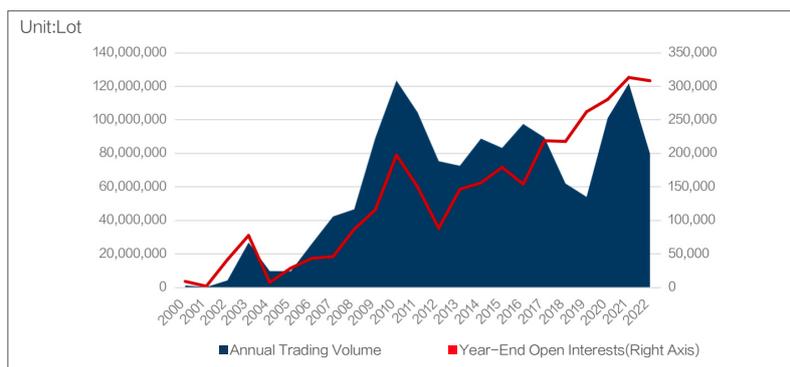
(II) World-leading market size and enhanced capability to serve the real economy

In 2022, SHFE RU futures achieved the cumulative trading volume of 79,639,400 lots and the turnover of RMB 10.44 trillion, with the daily open interest averaging 309.8 thousand lots, taking the 10th place in FIA’s ranking of global agricultural derivatives and topping its international counterparts.

Both the trading volume and turnover of TSR20 futures has been increasing since listing, with a market size larger than that of its international counterparts. In 2022, the INE TSR20 futures posted a cumulative trading volume of 13,591,700 lots, up 78.90% year-on-year, a turnover of RMB 1,436.544 billion, up 67.27% year-on-year, and an average daily open interest of 81,900 lots, up 77.27% year-on-year. It ranked the 33rd among the global agricultural derivatives in terms of trading volume.

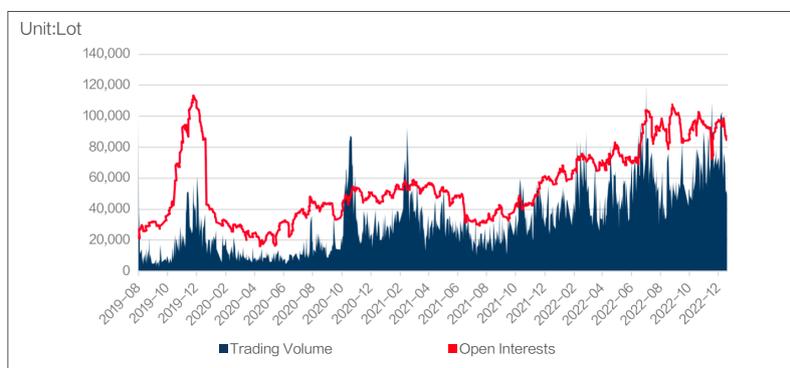
The natural rubber futures and TSR20 futures serve as effective risk management instruments for domestic and overseas investors and help avoid the operational risks arising from the volatile rubber market. During the pandemic, in the face of stranded purchase and sales, cash flow strains, and spot price fluctuation, rubber companies used futures tools to effectively avoid price risks. SHFE also adjusted the delivery fees for natural rubber futures and derivatives to help rubber companies cut the costs for participating in futures delivery, operate steadily, and assure the supply and price stability.

Annual Trading Volume and Year-end Open Interests of SHFE Natural Rubber Futures (2000–2022)



Notes:(1) Trading volume and open interest are counted as one-sided. (2) The contract size of natural rubber futures is adjusted from 5 metric tons per lot to 10 metric tons per lot starting from the contract RU1208.

Trading Volume and Open Interest of INE TSR20 Futures (2019.8–2022.12)



Notes: (1) Trading volume and open interest are counted as one-sided.

(III) Active participation of institutional investors and improving market structure

In terms of investor structure, RU and TSR20 futures markets are actively participated by corporate clients. Hedging has contributed a relatively large share to total trading volume. The

investor structure keeps improving. In 2022, the open interest contributed by corporate clients in RU and TSR 20 futures increased by 12.51% and 5.44% respectively, and their trading volume thereof increased by 25.04% and 31.04% respectively. In terms of overseas participation, most overseas clients of TSR20 futures are from Singapore, Thailand, and Hong Kong, China, who have taken an active part in both the trading and physical delivery.

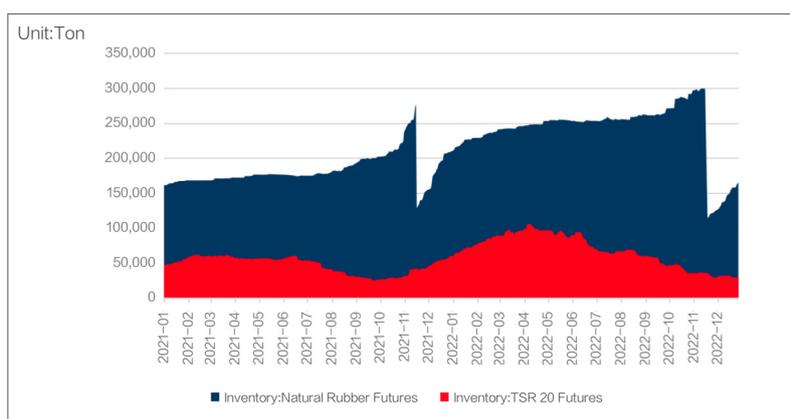
(IV) Delivery services have been optimized. With stable inventory and delivery volumes, the natural rubber futures functioned effectively in resource allocation.

The locations and storage capacity of the delivery warehouses and deliverable commodities of natural rubber futures have been optimized in line with the market development needs. 1.The total storage capacity has grown from about 50,000 metric tons in 1999 to 691,000 metric tons in 2022. 2.The layout of delivery storage facilities keeps improving.Tianjin, a major region of rubber consumption, was added in addition to the traditional consumption and production regions--Shanghai, Shandong, Yunnan, and Hainan--as a location of rubber storage facilities. 3.The storage facilities in consumption regions have also been expanded. In particular, the rubber storage capacity in Qingdao and Shanghai has grown from 35,200 metric tons in 1999 to 220,000 metric tons in 2022. 4.The deliverables have also been expanded and upgraded. As of the end of 2022, SHFE had accepted the products from 41 factories under 8 registered brands for the physical delivery of natural rubber futures.

The natural rubber futures has maintained a stable scale in both inventory and physical delivery. Over the past decade, the RU standard warrants have stabilized above 100,000 metric tons of the underlying commodity, and the average annual delivery volume stood at about 190,000 metric tons. As of December 30, 2022, the RU inventory recorded 165,000 metric tons, of which Shandong, Shanghai, Tianjin, Yunnan, and Hainan accounted for 49.49%, 19.54%, 6.55%, 21.57% and 2.85%, respectively. The annual cumulative delivery volume was 146,100 metric tons, up 28.59% year-on-year.

As to the designated delivery warehouses of TSR20 futures, which are located in Shanghai, Shandong and Hainan, 305,000 metric tons of their storage capacity has been used. INE had accepted the products from 37 factories under 25 registered companies as deliverables for the physical delivery of TSR20 futures. The accepted producers include 4 Chinese companies, 16 Thai companies, 2 Malaysian companies, and 3 Indonesian companies. As of December 30, 2022, the TSR20 inventory recorded 29,213 metric tons, of which Shandong, Hainan and Shanghai accounted for 92.75%, 7.81% and 0%, respectively. In 2022, the cumulative delivery volume of TSR20 futures was 157,600 metric tons, up 65.50% year-on-year.

Inventory Volumes of SHFE RU and INE TSR20 Futures



(V) Natural rubber options are listed to effectively serve the diversified risk management needs of companies.

Natural rubber (RU) option is the world's first options product with RU futures as the underlying. Its listing has enriched the natural rubber offerings in China's futures market and helped address the diverse, granular, and individual risk management needs of industrial enterprises.

Since its listing in 2019, RU options has seen an orderly-operating market, steady increase in trading volume and open interest, and active participation by investors. These helped RU options fulfill its role in risk management. The RU options recoded a cumulative trading volume of 5,350,400 lots, averaging 22,100 lots per day, 12.63% higher than the previous year. Its average daily open interest posted 64,900 lots, up 20.44%.

(VI) The SHFE OTC Platform helps solve the “last mile” problem for the financial market to serve the real economy.

To serve the real economy in more depth, SHFE launched the SHFE OTC Platform (formerly SHFE Standard Warrant Trading Platform) and kicked off the standard warrant and OTC derivatives businesses related to futures trading. On May 27, 2019, the trading of natural rubber standard warrants was rolled out. On December 9, 2020, the trading of extended natural rubber warrants went online. On December 15, 2022, the trading of bonded TSR20 standard warrants was launched. The SHFE OTC Platform addresses the diversified financial needs of rubber companies. Capable of daily trading and delivery, the Platform is of great significance in promoting the synergy of the futures and spot markets, coordinated development of on-exchange and OTC trading, and connectivity of domestic and overseas markets for natural rubber products.

In 2022, 27,371 natural rubber standard warrants were traded in 532 transactions, corresponding to 279,700 metric tons or RMB 3.498 billion worth of physicals. Extended natural rubber warrants recorded trading of 622 warrants in 11 transactions, equaling 6,200 metric tons or RMB 0.08 billion worth of physicals. TSR20 bonded warrants registered trading of 91 warrants in 8 deals, equivalent to 900 metric tons or RMB 9 million worth of physicals.

(VII) Targeted support for market participants and high-caliber industrial services

SHFE has been committed to poverty alleviation. It has experimented on and improved a futures industry-specific long-term mechanism for poverty alleviation. It has launched the “insurance + futures” program, “Secure-Production-Through-Options Campaign”, and a series of trainings concerning support for the agriculture, rural areas, and farmers, in a bid to combining natural rubber-facilitated targeted poverty alleviation with rural revitalization.

SHFE has carried out the pilot natural rubber “insurance + futures” program for six consecutive years from 2017 to 2022. With a total capital input of nearly RMB 580 million, this program has provided insurance for about 680,000 metric tons of natural rubber production and paid RMB440 million to some 640,000 rubber-farmer households in 31 cities and counties in Yunnan and Hainan as the compensation payouts. In 2022, SHFE launched “insurance + futures” projects, under which 170,000 rubber-farmer households in 21 counties and cities and 172,500 metric tons of natural rubber physicals were covered. The average payout rate stood at 90% and the payout amount RMB120 million, both hitting their record highs. In addition, projects for “options-based output stabilization” were introduced, under which 43,000 metric tons of natural rubber was insured, generating a proceed of RMB 28.9 million and an average payout rate of 93%.

03

Honors and Awards

获奖情况

| 获奖情况

2015.05

上期所《实行天然橡胶目标价格管理的研究报告—关于服务三农、支持橡胶产业的调研报告》获 2014 年上海金融业改革发展优秀研究成果二等奖。

2017.10

上期所天然橡胶“保险 + 期货”案例入选中国（上海）自由贸易试验区第八批金融创新案例。

2018

上期所天然橡胶“保险 + 期货”精准扶贫试点项目获 2017 年度上海金融创新成果奖提名奖。

2019.02

海胶集团“天然橡胶价格（收入）保险”入选中国（海南）自由贸易试验区第一批制度创新案例。

2020.01

上期所“天然橡胶期权上市”、上期能源“20 号胶期货上市”入选 2019 年上海国际金融中心建设十大事件。

2020.09

海胶集团“天然橡胶价格（收入）保险”获第一届海南省改革和制度创新奖三等奖（申报单位：海南省财政厅、海胶集团、海南银保监局、海南省农业农村厅、中国人民财产保险股份有限公司海南分公司、中国太平洋财产保险海南分公司）。

2020.11

上期能源“20 号胶期货上市”获 2019 年度上海金融创新成果奖三等奖。

2021.05

上期所凭借在天然橡胶“保险 + 期货”金融创新扶贫领域的先行先试和突出成效获“2017-2020 年度上海市脱贫攻坚先进集体”荣誉称号。

2021.12

新湖期货“天然橡胶‘保险 + 期货’开创白沙县精准扶贫新模式——新湖期货海南省白沙黎族自治县连续试点案例”入选全球减贫最佳案例，收录至南南合作减贫知识分享网站——中外减贫案例库及在线分享平台。

2022.11

上期能源上市国际铜期货、原油期权，并进一步推广 20 号胶期货定价运用，提升“上海价格”对国际大宗商品市场定价影响力入选中国（上海）自贸区试验区第十一批金融创新案例。

2023.02

中央广播电视总台 CGTN 以上期能源 20 号胶期货为主题拍摄的新闻“上海期货价格影响力再提升”获 2022 年上海市“银鸽奖”国际新闻作品优胜奖。

| Honors and Awards

2015.05

SHFE' s "Research Report on Implementing Target Price Management for Natural Rubber — Research Report on Serving the Agriculture, Rural Areas, and Rural People and Supporting the Rubber Industry" won the second prize among the outstanding research achievements of Shanghai' s financial reform and development in 2014.

2017.10

The SHFE' s natural rubber "insurance + futures" program was recognized in the 8th group of outstanding financial innovations of the China (Shanghai) Pilot Free Trade Zone.

2018

The SHFE' s pilot natural rubber "insurance + futures" targeted poverty alleviation program was nominated for the 2017 Outstanding Financial Innovations of Shanghai.

2019.02

The natural rubber futures price (revenue) insurance of China Hainan Rubber Industry Group Co., Ltd. was recognized as one of the first model cases of institutional innovation of China (Hainan) Pilot Free Trade Zone.

2020.01

INE' s "listing of Natural Rubber options" and "listing of TSR20 futures" won the third prize of the 2019 Shanghai Financial Innovation Award.

2020.09

The natural rubber futures price (revenue) insurance of China Hainan Rubber Industry Group Co., Ltd. won the third prize of the 1st Reform and Institutional Innovation Award of Hainan Province. (Applicants: Department of Finance of Hainan Province, China Hainan Rubber Industry Group Co., Ltd., CBIRC Hainan Office, Department of Agriculture and Rural Affairs of Hainan Province, PICC Property and Casualty Co., Ltd., Hainan Branch, and China Pacific Property Insurance Co., Ltd., Hainan Branch).

2020.11

INE' s "listing of TSR20 futures" won the third prize of the 2019 Shanghai Financial Innovation Award.

2021.05

SHFE won the honorary title of "2017–2020 Shanghai Advanced Group for Poverty Alleviation" for its pioneering and outstanding results in the field of natural rubber "insurance + futures" financial innovation and poverty alleviation.

2021.12

The Natural Rubber “Insurance + Futures” Creates a New Model for Precise Poverty Alleviation in Baisha County — The Xinhua Futures Continuous Pilot Case of Baisha Li Autonomous County in Hainan Province was named one of the best poverty reduction practices across the globe and was included in Global Poverty Reduction & Inclusive Growth Portal, a knowledge sharing platform for international poverty reduction information and experience under the South–South Cooperation.

2022.11

The INE’ s effort of listing bonded copper futures and crude oil futures, and promoting the application of TSR20 futures price as a pricing benchmark in physical trades to improve the influence of “Shanghai Price” in the global commodity markets have been recognized in the 11th group of outstanding financial innovations of the China (Shanghai) Pilot Free Trade Zone.

2023.02

CGTN news report “Shanghai’ s rubber futures gain more international investors” themed on INE’ s TSR20 futures was recognized as an excellent international news report in the 2022 Shanghai “Silver Dove Awards” .

04

Statistics

统计数据

统计数据

天然橡胶期货交易情况（1999.5-2023.2）				
累计成交 （亿手）	累计成交金额 （万亿元）	最高单日成交 （万手）	最高单日成交金额 （亿元）	最高单日持仓 （万手）
14.62	196.08	227.82 （2020.10.30）	3633.29 （2020.10.30）	41.77 （2023.3.13）

注：最高单日持仓数据取值时间为（1999.5-2023.3）

天然橡胶期货交割情况（1999.5-2023.2）	
累计交割 （万吨）	累计交割金额 （亿元）
344.40	514.37

天然橡胶期货主力合约价格运行情况（1999.5-2023.2）		
盘内最高价 （元/吨）	盘内最低价 （元/吨）	最大振幅
43500 （2011.2.9）	6320 （2001.12.25）	588.29%

天然橡胶期权交易情况（2019.1-2023.2）					
累计成交 （万手）	累计成交金额 （亿元）	累计行权量 （万手）	最高单日成交 （万手）	最高单日成交金额 （亿元）	最高单日持仓 （万手）
1423.05	429.17	7.19	6.95 （2023.3.16）	5.67 （2021.2.25）	11.85 （2023.3.21）

注：最高单日成交和最高单日持仓数据取值时间为（2019.1-2023.3）

20号胶期货交易情况（2019.8-2023.2）				
累计成交 （万手）	累计成交金额 （万亿元）	最高单日成交 （万手）	最高单日成交金额 （亿元）	最高单日持仓 （万手）
2875.62	3.05	11.99 （2022.7.13）	128.81 （2022.7.13）	11.82 （2023.3.7）

注：最高单日持仓数据取值时间为（2019.8-2023.3）

20号胶期货交割情况（2019.8-2023.2）	
累计交割 （万吨）	累计交割金额 （亿元）
38.68	39.41

20号胶期货主力合约价格运行情况（2019.8-2023.2）		
盘内最高价 (元/吨)	盘内最低价 (元/吨)	最大振幅
13040 (2021.2.26)	7345 (2020.4.7)	77.54%

上期综合业务平台运行情况			
	累计成交 (笔)	累计成交仓单 (张)	累计成交金额 (亿元)
天然橡胶标准仓单 (2019.5-2023.2)	3946	129296	153.83
天然橡胶延伸仓单 (2020.12-2023.2)	129	4016	5.50
20号胶标准仓单 (2022.12-2023.2)	8	91	0.09

Statistics

RU Futures Trading (May 1999–Feb. 2023)				
Cumulative Trading Volume (100 million lots)	Cumulative Turnover (RMB trillion)	Single Day High Volume (10,000 lots)	Single Day High Turnover (RMB 100 million)	Single Day High Open Interest (10,000 lots)
14.62	196.08	227.82 (Oct. 30, 2020)	3633.29 (Oct. 30, 2020)	41.77 (Mar. 13, 2023)

Note: Single day high open interest is quoted in the period of May 1999–Mar. 2023

RU Futures Delivery (May 1999–Feb. 2023)	
Cumulative Delivery Volume (10,000 MT)	Cumulative Delivery Value (RMB 100 million)
344.40	514.37

Price of RU Futures Active Contract (May 1999–Feb. 2023)		
Intraday High (Yuan/MT)	Intraday Low (Yuan/MT)	Max. Movement
43500 (Feb. 9, 2011)	6320 (Dec. 25, 2001)	588.29%

RU Options Trading (Jan. 2019–Feb. 2023)					
Cumulative Trading Volume (10,000 lots)	Cumulative Turnover (RMB 100 million)	Cumulative Exercise Volume (10,000 lots)	Single Day High Trading Volume (10,000 lots)	Single Day High Turnover (RMB 100 million)	Single Day High Open Interest (10,000 lots)
1423.05	429.17	7.19	6.95 (Mar. 16, 2023)	5.67 (Feb. 25, 2021)	11.85 (Mar. 21, 2023)

Note: Single day high trading volume and single day high open interest is quoted in the period of Jan. 2019–Mar. 2023

TSR20 Futures Trading (Aug. 2019–Feb. 2023)				
Cumulative Trading Volume (10,000 lots)	Cumulative Turnover (RMB trillion)	Single Day High Trading Volume (10,000 lots)	Single Day High Turnover (RMB 100 million)	Single Day High Open Interest (10,000 lots)
2875.62	3.05	11.99 (Jul. 13, 2022)	128.81 (Jul. 13, 2022)	11.82 (Mar. 7, 2023)

Note: Single day high open interest is quoted in the period of Aug. 2019–Mar. 2023

TSR20 Futures Delivery (Aug. 2019–Feb. 2023)	
Cumulative Delivery Volume (10,000 MT)	Cumulative Delivery Value (RMB 100 million)
38.68	39.41

Price of TSR20 Futures Active Contract (Aug. 2019–Feb. 2023)		
Intraday High (Yuan/MT)	Intraday Low (Yuan/MT)	Max. Movement
13040 (Feb. 26, 2021)	7345 (Apr. 7, 2020)	77.54%

Performance of SHFE OTC Service Platform			
	Cumulative Trading Volume (by Deal)	Cumulative Trading Volume (by Warrant)	Cumulative Turnover (RMB 100 million)
Natural Rubber Standard Warrants (May 2019–Feb. 2023)	3946	129296	153.83
Natural Rubber Extended-duration Warrants (Dec. 2020–Feb. 2023)	129	4016	5.50
TSR20 Standard Warrants (Dec. 2022–Feb. 2023)	8	91	0.09

结束语

Conclusion

在中国证监会的坚强领导和市场各方的大力支持下，上期所在天然橡胶期货衍生品市场深耕细作，不断创新维护市场运行、优化完善产品体系，在天然橡胶期货上市 30 周年之际取得了一定成绩。

下一步，上期所将不忘初心，继续以产品体系创新、合约规则持续优化和提升国际影响力为主线，着力构建中国特色现代天然橡胶期货衍生品体系。一是继续围绕“一主两翼”打造立体化产品体系，研究推出 20 号胶期权等，全方位、多角度地服务好天然橡胶产业。二是继续做精做细产品，以市场需求和实际问题为导向，不断推动规则和制度优化，提高市场运行效率和服务水平，切实满足市场主体的实际需求。三是进一步提升“上海胶”国际影响力，继续开展上期强源助企（服务类定价基准）20 号胶期货“丰羽行动”，巩固与境外机构的交流合作等。四是聚焦产业链供应链稳定，不断提高国内外大宗商品生产、消费与流通等上下游企业参与期货市场的深度广度，更好服务橡胶产业和实体经济的高质量发展。

Under the leadership of CSRC and with strong support of various market participants, SHFE, committed to the development of the natural rubber derivatives market, has been pursuing orderly market operation and optimized its product lineup through innovations. With these efforts, SHFE presented notable achievements at the 30th anniversary of the listing of RU futures.

Staying true to its original aspirations and missions, SHFE will continue to focus on product innovation, contract rule optimization, and higher international influence, with a view to building a modern natural rubber derivatives system with Chinese characteristics. The focus will be on the following four areas. First, SHFE will continue to diversify product offerings with future products as the mainstay and the derivatives and a well-developed standard warrant trading system as two supporting lines. It will launch TSR20 options to provide comprehensive support to the natural rubber industry in all aspects. Second, SHFE will, in light of market demand and outstanding problems, continue to improve products, upgrade market rules and contract specifications, and ensure more efficient market operation and better services, to cater to the actual needs of market participants. Third, SHFE will further improve the global influence of “Shanghai Rubber”. We will proceed with the pilot pricing and “Empowering Mission” incentive program for TSR20 futures, with a view to improving rubber production and providing more support to producers (service pricing benchmark). We will cement the exchange and collaboration with overseas institutions. Fourth, giving priority to stable industry and supply chain, SHFE will embrace deeper and wider participation of domestic and overseas commodity producers, consumers and distributors in the futures market, to better serve the high-quality development of the natural industry and the real economy.



上海期货交易所
SHANGHAI FUTURES EXCHANGE

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