# 烯烃与原料轻质化论坛 2020

**Olefins & Feedstock Lightening Forum** 

二季度 Q2 广西 北海 Beihai

主办方:



官微:





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### 会议背景

烯烃原料轻质化已经成为全球趋势。亚化咨询测算,基于2019年中国主要烯烃原料均价与典型项目,5类项目吨烯烃成本由低到高依次为:乙烷裂解、PDH、CTO、石脑油裂解、MTO。以轻烃为原料的项目具备了较强的成本优势,能够获得较为可观的利润。

中国正处于烯烃原料轻质化风暴的中心。目前,中国拟在建轻烃裂解与PDH项目合计逾70个。过去一年,新浦轻烃综合利用项目投产为中国进口乙烷裂解制乙烯开创了先河;中西部采用国产乙烷为原料的乙烯项目,台塑、华谊等PDH项目陆续开建;东华茂名、开金温州等PDH项目签约。传统石脑油裂解项目亦开展轻质化改造,如齐鲁石化、上海赛科等。

可以预见,中美在乙烷、丙烷等贸易方面将加深合作,有利于中国烯烃原料轻质化的推进。经过旷日持久的拉锯,中美双方终于在2020年1月15日正式签署第一阶段经贸协议,促成了两国逾524亿美元能源化工产品的大单。

然而,烯烃及衍生品在经历了几年非常强劲的需求增长之后,行业发展或将迎来一些阻力:新项目大量布局,供应过剩风险加剧;各国限塑、禁塑政策纷纷出台,为聚烯烃行业发展带来压力;美国谋求大量廉价乙烯及衍生品的出口,将对全球市场造成较大冲击;全球经济下行,石化产品需求增长乏力。但凡不能压垮你的,最终会使你更强大,阻力势必将转化为推动中国烯烃乃至石化产业高质量发展的动力。

中国烯烃与原料轻质化论坛将于2020年二季度在广西北海召开。新形势下,石化与烯烃行业面临哪些机遇与挑战?面对更为激烈的产业竞争,企业该如何重新定位以脱颖而出?经历了过去一年的发展,行业又迸发出哪些新的活力?加入我们,共同深度探讨。会议还将安排工业参观考察。

### 会议主题

- 1. "十四五"石化产业规划前瞻与政策解读
- 2. 烯烃原料原料多元化与轻质化趋势研判
- 3. 不同技术路线成本分析与经济性比较
- 4. 贸易摩擦给石化产业带来的机遇与挑战
- 5. 烯烃及衍生品生产工艺与催化剂改进
- 6. 原料轻质化改造技术介绍与工程案例
- 7. 全球轻烃资源状况分析(分布、采储量、终端、船舶、运输、供需、价格)
- 8. 烯烃生产技术开发和商业化前景(STO、自主开发PDH、原油直接制烯烃等)
- 9. 聚焦新项目: PDH、乙烷裂解、轻烃综合利用、CTO/MTO、炼化一体化
- 10. 医用烯烃下游材料的开发与应用(聚烯烃、PC、SEBS、PVC、丁腈橡胶等)
- **11.** 原料轻质化给氢能、丁烯-**1**、丁二烯等产业带来的 机遇与挑战
- 12. 东盟市场与"一带一路"烯烃产业链新机遇
- 13. 工业参观与考察

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### **Background**

Olefins & Feedstock Lightening has become a global trend. The success of the shale gas revolution has triggered the migration of olefins feedstock from naphtha to lighter alkane in the US and around the world. According to ASIACHEM, based on the average price of major olefins feedstock and typical projects in China in 2019, the cost of olefins per ton of the 5 types of projects in order from low to high is: ethane cracking, PDH, CTO, naphtha cracking, and MTO. Projects using light hydrocarbon as feedstock have strong cost advantages and can achieve considerable profits.

China is at the center of a storm of olefin feedstock lightening. At present, China has more than 70 light hydrocarbon cracking and PDH projects under construction or planning. In the past year, the Xinpu LHCU project was put into operation, setting a precedent for cracking using imported ethane; Lanzhou PC and PetroChina Tarim's ethylene projects started construction, which use domestic ethane as feedstock; Formosa, Huayi, Binhua, Sinochem are started PDH projects construction one after another; Meanwhile, Donghua Maoming and Kaijin Wenzhou are signed contract with local government and launced work. Some new refining and chemical projects are equipped with gas cracking furnaces for large ethylene, which greatly increases the flexibility of feeding. Traditional naphtha cracking projects also carry out feedstock lightening transformation, such as Qilu PC, SECCO, etc.

It is foreseeable that China and the US will deepen cooperation in the trade of ethane, propane and other light hydrocarbon, which will help promote the lightening of China's olefin feedstock. After protracted tug-of-war, China and the US finally formally signed the phase-one agreement on January 15, 2020, which resulted in a large order for more than USD52.4bn in energy and chemical products. According to the agreement, China will increase purchase from the US for at least USD18.5bn in 2020 and at least USD33.9bn in 2021 based on the amount in 2017.

However, after years of very strong demand growth for olefins and derivatives, the development of the industry may usher in some resistance: a large number of new projects are being deployed, the risk of oversupply is intensified; plastic restrictions and bans on plastics have been introduced in various countries, brings pressure for polyolefin development; the US seeks a large number of cheap ethylene and derivatives exports, which will have a greater impact on the global market; olefins and derivatives prices are under pressure, higher-cost capacity faces the risk of being eliminated; the global economy is down, and petrochemicals product demand growth is weak. What does not kill us, makes us stronger. The resistance will definitely be transformed into the driving force for the high-quality development of China's olefins and even the petrochemical industry.

#### Olefins & Feedstock Lightening Forum 2020 will be held in the second quarter in Beihai, Guangxi.

What opportunities and challenges do the petrochemical and olefins production enterprises face under the new situation? Faced with more intense industry competition, how can companies reposition themselves to stand out from the crowd? After the development of the past year, what new vitality has the industry erupted? Join us, for a deeper discussion together. Industrial visit will also be arranged.

### **Topics**

- 1. Petrochemical Industry "14th Five-Year Plan" prospects and policy interpretation
- 2. Research and judgment on olefins feedstock diversification and lightening
- 3. Cost analysis and economic comparison of different technology routes
- 4. Opportunities and challenges brought by trade friction to petrochemical industry
- 5. Olefins and derivatives production process and catalyst improvement
- 6. Feedstock lightening transformation technology and engineering case introduction
- 7. Global light hydrocarbon resources analysis (distribution, reserves, terminals, ships, transportation, supply & demand, prices)
- 8. Olefins production technology development and commercialization (STO, China developed PDH, crude oil direct to olefins, etc.)
- 9. Focus on new projects: PDH, ethane cracking, LHCU, CTO/MTO, refining and chemical integration
- 10. Development and application of olefins related materials for medical (polyolefin, PC, SEBS, PVC, nitrile rubber, etc.)
- 11. Opportunities and challenges brought by the feedstock lightening to hydrogen energy, butene-1, butadiene, etc.
- 12. ASEAN market and the "the Belt and Road" new opportunities for olefin industry chain
- 13. Industrial travel