



内蒙古伊泰集团有限公司

INNER MONGOLIA YITAI GROUP CO.,LTD

从煤炭到高端化工产品

-----打造煤化工的高质量发展模式

From coal to high-quality chemical products

-----Build high quality development mode of coal chemical industry



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YITAI

Company Profiles 公司概况

Established in 1988, Yitai Group Corporation is the largest coal-based integrated energy enterprise in Inner Mongolia Autonomous Region, 15 consecutive years among the top 500 Chinese enterprises, ranked No. 214 in 2018. Yitai Coal Company Limited, one of its major subsidiaries, is dual-listed on the Stock Exchanges of Hong Kong and B share.

伊泰集团成立于1988年，是内蒙古自治区最大的煤炭生产及加工综合性能源企业，连续15年跻身中国企业500强，2018年位列第214位。内蒙古伊泰煤炭股份有限公司为其主要控股子公司，是中国首家“B+H”股上市公司。

Business Sections 主营业务

- Coal production 煤炭生产
- Railway transportation 铁路运输
- Coal-to-liquid fuel and coal-to-chemicals 煤液化及煤化工
- Real Estate 房地产开发
- Ecological agriculture 生态农牧业

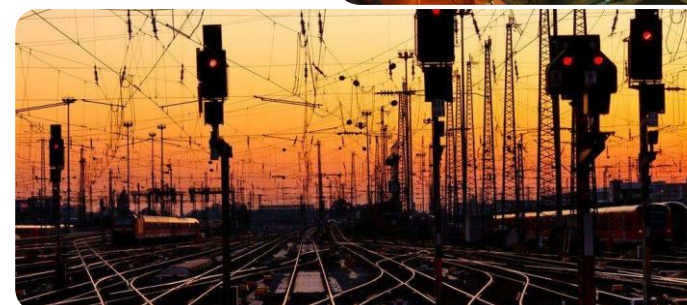
Financial Data (2018) 财务数据 (2018)

Sales : 78,818,410,000 RMB

营业收入 : 788亿元人民币

Total Assets : 110,000,000,000 RMB

总资产 : 1100亿元人民币



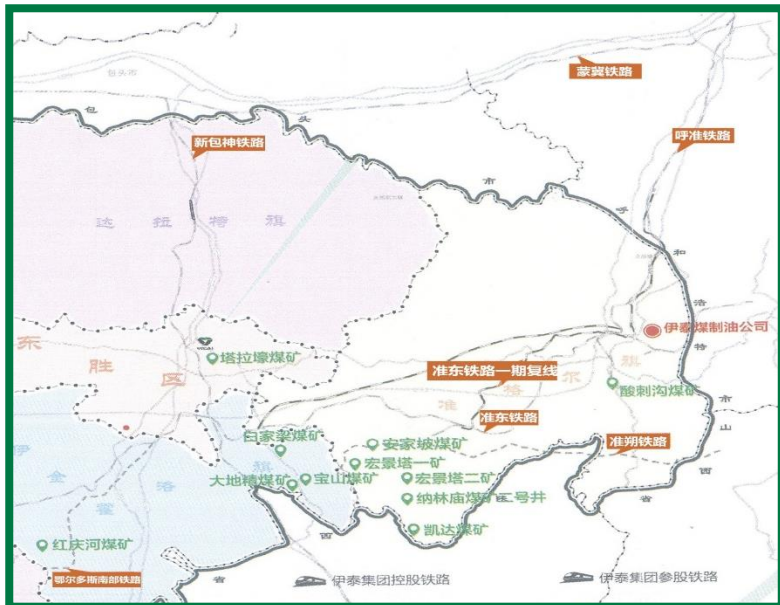
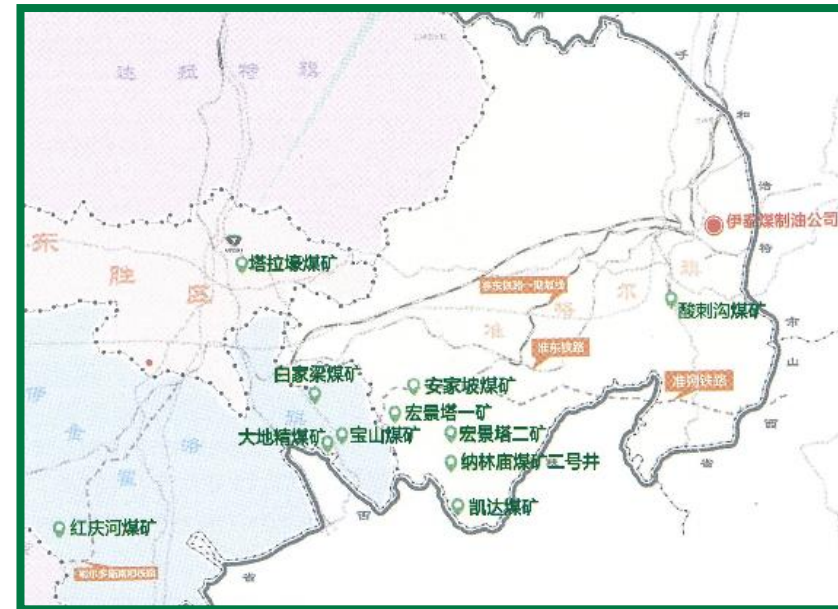


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Coal Production 煤炭生产

As of the end of 2017 , Yitai has 11 coal mines in operation. The total coal production capacity is more than 60 Mt/a.

截至2017年底，伊泰集团现有大中型生产矿井11座，总生产能力超过6000万吨/年。



Railway 铁路

As of the end of 2017 , Yitai has 7 Self-operated railways including Zhundong railway and Huzhun railway etc.(562.56 km in total , 465km in operation), Jointly-operated railways over 3,000 km.

截至2017年底，伊泰集团拥有自营铁路7条，包括准东铁路及呼准铁路等，总里程562.56km，其中现已运营465km，另外参股经营铁路里程超过3000km。



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Yitai coal chemical industry development process

伊泰煤化工产业发展历程

2002年

Participated in the research and development of "high temperature slurry bed Fischer Tropsch synthesis oil processing technology" of Synfuels China and achieved success.
参与中科院山西煤炭化学研究所“高温浆态床费托合成油品加工技术”的研发并中试成功。

2005年

Passed the CAS appraisal and the acceptance of National 863 project.
通过了中科院成果鉴定和科技部863专家组验收。

2006年

Invest 4.3 billion to build Yitai 160kt/a CTL demonstration Project.
投资43亿元建设大路煤制油16万吨示范项目。

2009年

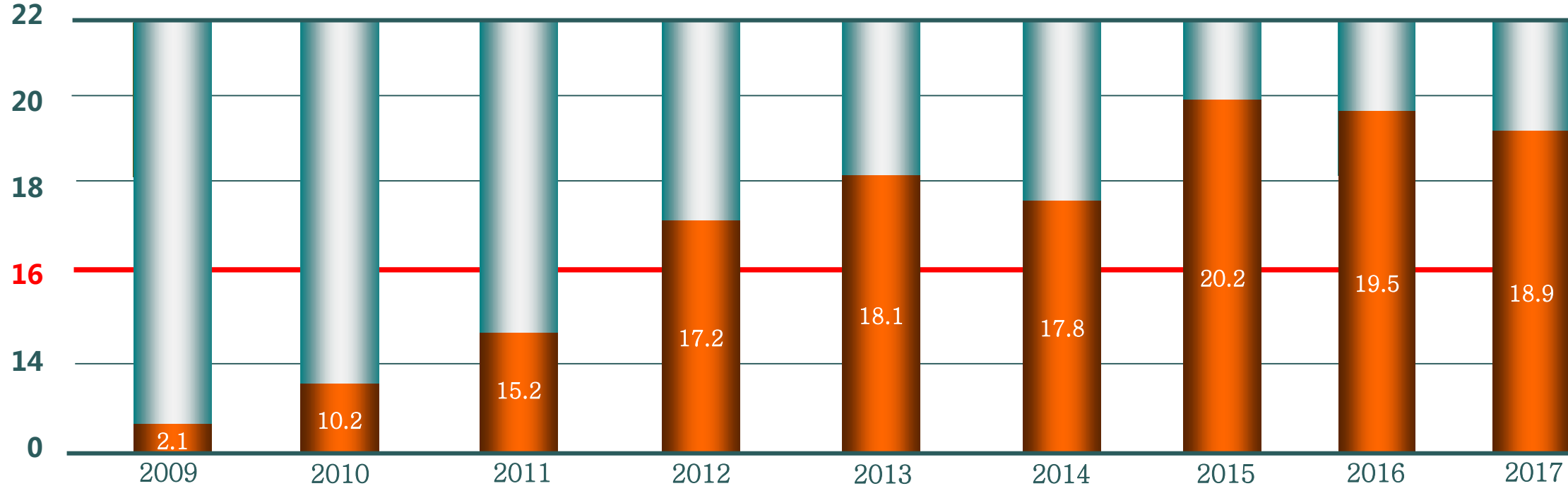
The first domestic coal-based synthetic oil demonstration project with capacity of 160kt/a into operation successfully and produced the first barrel of commercial synthetic oil of China.
建成我国第一条16万吨示范生产线，并顺利产出我国煤间接液化工业化第一桶合格成品油。



- It is the first demonstration project of CTL reached production capacity during the 11th five-year plan period, and the first production line of coal indirect liquefaction which owns full intellectual property rights in China
- “十一五”期间首个达产的煤制油示范项目，我国煤炭间接液化完全自主技术产业化第一条生产线。
- In July 2010, it passed the 72-hour performance calibration of Inner Mongolia Development and Reform Commission, which is the first CTL project in China that has been implemented and operated at full capacity.
- 2010年7月通过内蒙古发改委72小时性能标定，是我国首次实施并达到满负荷运行的煤制油项目。



Output of Inner Mongolia Yitai Group 160kt/a CTL project
内蒙古伊泰集团16万吨/年煤基合成油项目产量



2013年8月

Yitai Chemical Company 1.2MT/a project
start construction
伊泰化工公司120万吨项目开工建设

2016年
12月30日

The main equipment of the project was
successfully delivered
项目主装置成功中交

2017年

6月8日

A coal slurry gasification furnace A one-time
feed success
水煤浆气化A炉一次投料成功

7月6日

Fischer-Tropsch unit successfully produced qualified wax
费托合成单元顺利产出合格蜡

Oil refining unit output qualified naphtha, diesel
油品加工精制单元产出合格石脑油、柴油

7月25日

Single synthesis reactor production load reached 100% capacity.
单台合成反应器生产负荷达到设计负荷的100%

9月25日

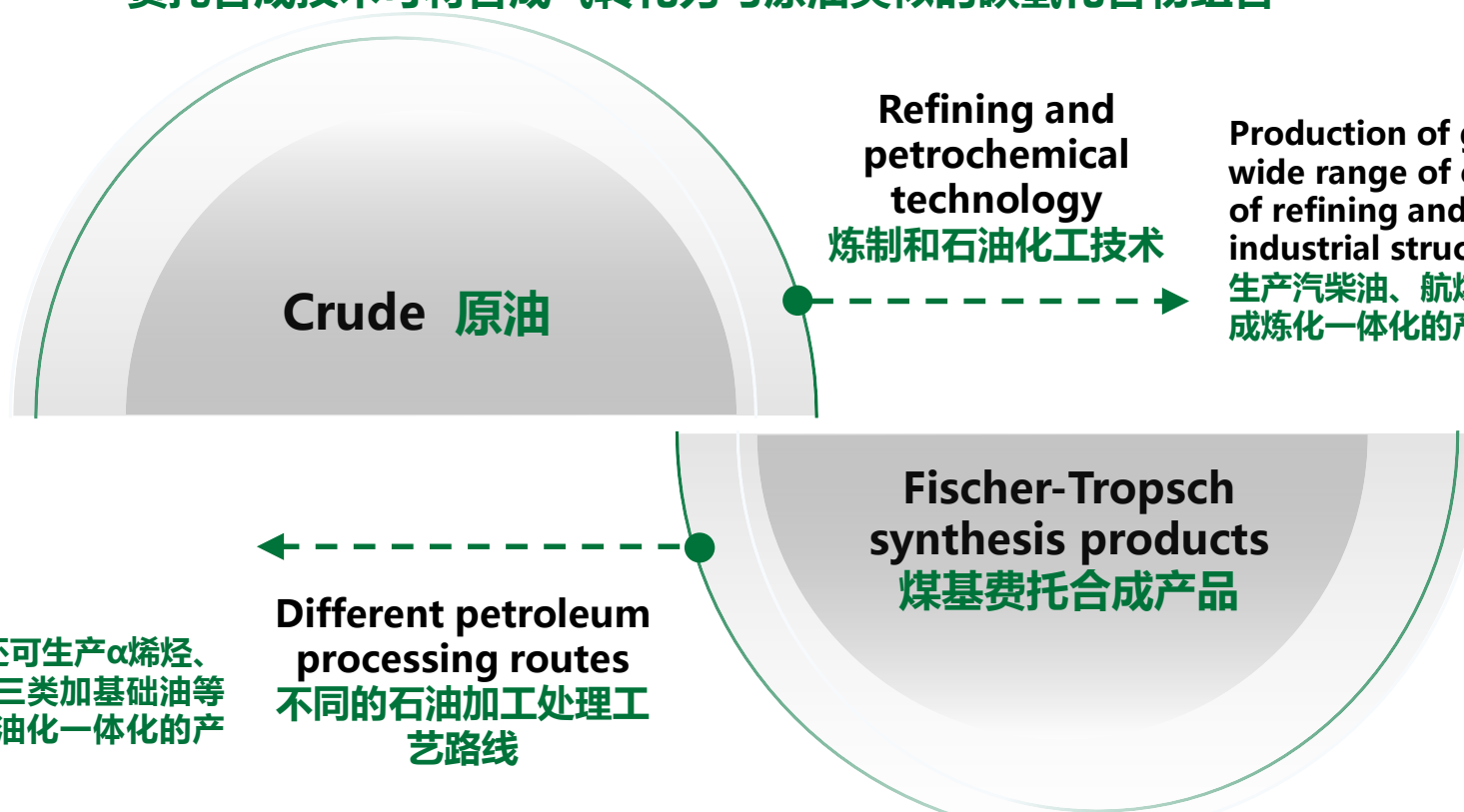
It took only 3 months from commissioning test to full load operation, creating a
miracle in the industry.
从投料试车到实现满负荷运行用时近3个月，创造了行业奇迹。



Development Strategy for Coal to Chemicals of Yitai Group

伊泰集团煤化工产业发展战略

Fischer-Tropsch synthesis converts the syngas into hydrocarbons with a composition similar to crude oil
费托合成技术可将合成气转化为与原油类似的碳氢化合物组合



它不仅可加工生产柴油、汽油等燃料，还可生产 α 烯烃、环保液蜡、高熔点蜡、高端溶剂油、三类加基础油等化工产品，及下游高附加值产品，形成油化一体化的产品结构。

It can not only process and produce fuel such as diesel oil and gasoline, but also produce chemical products such as α -olefins, environment-friendly liquid wax, high-melting point wax, high-quality solvent oil, group three plus base oil and downstream high value-added products, forming an integrated product structure of oil & chemicals.

Development Strategy for Coal to Chemicals of Yitai Group

伊泰集团煤化工产业发展战略

maximize the value of oil and chemicals”
宜油则油、宜化则化、油化并举、价值最大

1.0 version of coal-based clean oil
1.0版煤基清洁油品

2.0 version of coal-based Chemicals
2.0版煤基化工品

3.0 version of coal-based fine chemicals and new materials
3.0版煤基精细化学品及新材料

Platform cooperation mode
平台化合作模式

Upgrading the level of independent research and development

自主研发水平提升

Integration of research, production and marketing

研、产、销一体化

To build Yitai group coal chemical industry into a world-class clean energy and clean use platform enterprise.

将集团煤化工打造成为世界级的清洁能源与清洁利用平台企业。



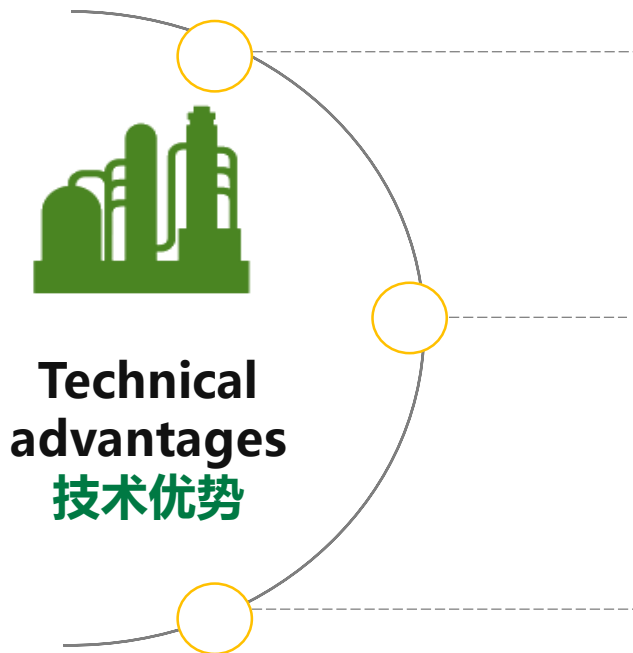
YITAI

Development Advantages of Coal to Chemicals of Yitai Group

伊泰集团煤化工产业发展优势

After 16 years of development, the CTL industry of Yitai group has been running smoothly from laboratory pilot test to demonstration project, from industrialization promotion to leading level of the industry, accumulated rich production construction and management experience, and possessed a strong R&D team, formed industrial competitiveness.

伊泰集团煤制油产业经过16年的发展，从实验室中试到示范项目安稳运行，从工业化推广到达到行业领先水平，积累了丰富的生产建设、管理经验，拥有了强大的技术研发团队，形成了伊泰集团煤化工板块的行业竞争力。



Relying on the R&D superiority of Synfuels China and combining with our own R&D strength, it continuously upgrades the production process and technology research and development, and has a strong ability of CTL technology and process optimization.

依托中科合成油专业研发优势并结合自有研发力量，不断实现生产工艺和技术研发的升级，拥有强大的煤制油技术和工艺优化能力。

Coal based new materials research institute has been set up to constantly develop marketable coal based fine chemicals and new materials products.

成立了煤基新材料研究院等研发平台，不断研发适销对路、高附加值的煤基精细化学品和新材料产品。

As an experimental platform for industrial production and product extension, the 160kt/a CTL demonstration project is utilized to continuously optimize FT process and carry out industrial enlargement of new technology, new equipment and new process.

利用16万吨/年煤制油示范项目作为工业生产和产品延伸的实验平台，不断优化FT工艺，开展新技术、新设备、新工艺的工业放大。

Production management advantages 生产管理优势



Our 160 kt/a CTL demonstration project has been running safely 、 steadily and overload for six consecutive years, and we have accumulated a great deal of production experience in the past ten years. We have built a CTL R&D and management operation team composed of more than 2,000 middle and senior scientific and technological personnel , which has realized the full-load operation of 1.2 million tons/a fine chemicals projects after commissioning, which all reflect the advantages of the CTL production and operation management of Yitai group.

16万吨/年煤制油示范项目连续六年安全稳定超负荷生产，十多年安稳运营积累了大量的生产经验，伊泰集团不断培养人才梯队并打造出一支2000多名中高级科技人员组成的煤制油研发和管理运营团队，实现了120万吨/年精细化学品项目投产后快速实现满负荷运行，这都体现了伊泰集团煤制油生产运营管理的优势。

Capacity Advantage 产能优势

The 1.2million tons/a fine chemicals project fully drew lessons from 160kt/a CTL demonstration project, realized the project rapid production and stable operation with full load. Yitai Group will continue to sum up production, construction and management experience, steadily promote the start-up of the approved 2 million tons/year of Dalu and 1 million tons/year of Yili and 2 million tons/year coal-to-oil project in Xinjiang which is being applied for approval. In the next five years, Yitai Group will gradually form an industrial chain of CTL and fine chemicals with an annual output of over 6 million tons, which integrates coal mine-CTL-petrochemical extended processing.

120万吨/年精细化学品项目充分借鉴、实施16万吨/年煤制油示范项目十多年积累的优秀生产管理运营经验，实现了项目快速达产、满负荷安稳运行。伊泰集团将继续总结、归纳以上项目的生产、建设和管理经验，稳步推进已获核准的大路200万吨/年和伊犁100万吨/年以及正在核准的新疆200万吨/年煤制油项目的启动工作，未来5年伊泰集团将逐步形成煤矿—煤制油—石油化工延伸加工一体化的年产600万吨以上规模的煤制油及精细化学品产业链。



Yitai Group coal chemical industry planning layout

伊泰集团煤化工产业布局



According to the principle of “maximize the value of oil and chemicals” ,we will build our coal chemical industry into a clean energy enterprise integrating the production of clean oil, refined chemicals and high-end materials, with Inner Mongolia and Xinjiang as production bases, we will continue to expand globally with the support of the “One Belt And One Road” policy, so as to achieve the upgrading and leap of our industrial layout .

按照“油化并举、价值最大”的原则，将集团煤化工打造成为集清洁油品、精细化工品、高端材料生产于一体的清洁能源企业，以内蒙和新疆为生产基地，借助“一带一路”政策支持不断向全球拓展，进而实现集团产业布局的升级和跨越。



YITAI

Social Responsibility

社会责任

1

Yitai carbon sink forests project 伊泰碳汇林项目

carbon sink forest in Kubuqi desert , Hangjinqi and 770,000 mu of windbreak and sand fixationA total investment of about 400 million yuan was made to complete the construction of 570000 mu of .

累计投资约4亿元，完成杭锦旗库布其沙漠碳汇林建设57万亩，防风固沙达到77万亩



2

CO2 comprehensive utilization project 二氧化碳综合利用项目

By using the CO2 waste gas of Yitai chemical company and relying on mature and reliable self-owned technology of the cooperative enterprise to produce high purity industrial grade and food grade CO2, the CO2 emission reduction can be achieved about 600,000 tons per year.

利用伊泰化工公司的CO2 废气，依靠合作企业成熟、可靠的自有技术生产高纯工业级和食品级CO2，每年可实现减排CO2约60万吨。



3

Tail gas convert project 尾气重整项目

Cooperate with domestic colleges and universities to develop dry gas reforming technology, convert CO2 into syngas, and realize recycling utilization of CO2.

与国内高校合作，研发尾气重整技术，将CO2转化为合成气，实现了CO2的循环利用。

4

CO2 to formic acid pilot project 二氧化碳电解制甲酸中试项目

In cooperation with the international scientific research team, the Pilot project of converting CO2 into formic acid was carried out with the help of the self-developed electrochemical reduction technology, realizing CO2 emission reduction and value-added

与国际科研团队合作，利用自主开发的电化学还原技术，进行了将CO2转为甲酸的中试研究项目，实现了CO2的减排和增值。



煤炭 | 煤化工 | 铁路 | 置业 | 生态环境修复和有机农业
coal coal chemical railway real estate ecological agriculture

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合作
cooperation



共赢
win-win