



“绿色低碳·能源变革” 国际高端论坛

第355场中国工程科技论坛

会议手册
Conference Manual

International High-level Forum on Green and Low-carbon Energy Revolution
355th Science and Technology Forum of Chinese Academy of Engineering

2022年8月19日 中国·北京
August 19, 2022 Beijing

主办单位：中国工程院

承办单位：中国石油天然气集团有限公司 中国工程院化工、冶金与材料工程学部

Host: Chinese Academy of Engineering

Organizers: China National Petroleum Corporation

Chemical, Metallurgical and Materials Engineering Division, Chinese Academy of Engineering

一、会务须知

(一) 会议时间地点

时间：2022年8月19日（星期五）9:00-17:30

地点：中国石油科技交流中心

（北京市昌平区沙河镇西沙屯桥西中国石油科技园 A16 地块）

(二) 会务组联系人

1. 论坛会务

总协调：于建宁 18600596711

吴谋远 13810659798

主论坛：朱颖超 13436995518

向征艰 18511071305

分论坛一：薛明 18518377683

分论坛二：陈艳鹏 13810490576

分论坛三：乔明 13671139089

2. 媒体宣传

吕阳春 13810830017

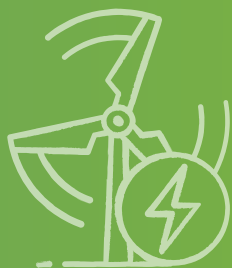
李妍楠 13488676229

3. 酒店协调、疫情防控、医疗服务

于会庆 13910871982

侯艳秀 18810241098

Green and
Low-carbon



“绿色低碳·能源变革” 国际高端论坛

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International High-level Forum on Green
and Low-carbon Energy Revolution
355th Science and Technology Forum of Chinese Academy of Engineering



I. Instructions

(I) Conference Time and Venue

Time: 9:00-17:30, August 19, 2022 (Friday)

Venue: CNPC Sci-Tech Exchange Center

(China Petroleum Science and Technology Park, West Shatunqiao, Shahe Town,
Changping District, Beijing)

(II) Contact Persons for Conference Service

(1) Forum service

Coordination: Yu Jianning 18600596711

Wu Mouyuan 13810659798

Main forum: Zhu Yingchao 13436995518

Xiang Zhengjian 18511071305

Sub forum 1: Xue Ming 18518377683

Sub forum 2: Chen Yanpeng 13810490576

Sub forum 3: Qiao Ming 13671139089

(2) Media

Lu yangchun 1381083001

Li Yannan 13488676229

(3) Hotel Conference; Epidemic prevention and control; Medical services

Yu Huiqing 13910871982

Hou Yanxiu 18810241098



二、会议日程

主论坛

开幕式暨主旨演讲

论坛地点：D座三层报告厅

主持人：**戴厚良**，中国工程院院士，中国石油集团董事长

9:00-9:10

会议开幕致辞

李仰平 | 中国工程院院士，中国工程院副院长

9:10-9:30

绿色低碳背景下的中国能源安全与发展战略

戴厚良 | 中国工程院院士，中国石油集团董事长

9:30-9:50

全球能源绿色低碳转型关键问题与创新发展的

丹尼尔·耶金 | 标普全球 (S&P Global) 副董事长

9:50-10:10

会间茶歇

International High-level

II. Agenda

Main Forum	Opening Ceremony and Keynote Speech
	Venue: Lecture Hall, F/3, Block D Moderator: Dai Houliang , Academician of Chinese Academy of Engineering, Chairman of CNPC
9:00-9:10	Opening Address Li Zhongping Academician and Vice President of Chinese Academy of Engineering
9:10-9:30	China's Energy Security and Strategy in the Context of Green and Low-carbon Development Dai Houliang Academician of Chinese Academy of Engineering, Chairman of CNPC
9:30-9:50	Key Issues and Innovative Development in the Green and Low-carbon Transition of Global Energy Daniel Yergin Vice Chairman of S&P Global
9:50-10:10	Tea Break



Energy Revolution

主论坛

大会报告

主持人：焦方正，中国石油集团副总经理

10:10-10:30

关于新能源与传统能源融合发展的若干思考

吴 吟 | 国家能源局原副局长

10:30-10:50

对我国实现碳达峰碳中和战略及路径的思考

杜祥琬 | 中国工程院院士、原副院长

10:50-11:10

油气行业绿色低碳转型与科技创新

孙龙德 | 中国工程院院士

11:10-11:30

石化化工行业绿色低碳转型升级与科技创新

陈建峰 | 中国工程院院士，中国工程院秘书长

11:30-11:50

新型电力系统演变趋势与技术发展展望

舒印彪 | 中国工程院院士，中国华能集团董事长

主论坛

论坛总结

11:50-12:00

主论坛总结

戴厚良 | 中国工程院院士，中国石油集团董事长

12:00-14:30

午餐与休息

Main Forum

Assembly Reporting

Moderator: Jiao Fangzheng, Vice President of CNPC

10:10-10:30

On the Integrated Development of New Energy and Traditional Energy

Wu Yin | Deputy director of the National Energy Administration

10:30-10:50

On the Strategy and Paths towards Carbon Peaking and Carbon Neutrality In China

Du Xiangwan | Academician of the Chinese Academy of Engineering, Deputy Director of the National Energy Advisory Committee

10:50-11:10

Green and Low-carbon Transition and Innovative Development in the Oil & Gas Industry

Sun Longde | Academician of Chinese Academy of Engineering

11:10-11:30

Green and Low-carbon Transition, Upgrading and Technology Innovation in the Petrochemical Industry

Chen Jianfeng | Secretary-General of Chinese Academy of Engineering, Professor of Beijing University of Chemical Technology

11:30-11:50

Prospects for the Development and Technological Innovation of New Power Systems

Shu Yinbiao | Academician of Chinese Academy of Engineering, Chairman of China Huaneng Group

Main Forum

Forum Summary

11:50-12:00

Concluding Speech

Dai Houliang | Academician of Chinese Academy of Engineering, Chairman of CNPC

12:00-14:30

Lunch Break





专题分论坛

1

油气行业绿色低碳转型发展与创新论坛

论坛地点：D座三层报告厅

主持人：谭天伟，中国工程院院士

-
- 14:30-14:55 油气行业数字化转型与智能化发展趋势与前景预判
刘 台 | 中国工程院院士
-
- 14:55-15:20 天然气在我国能源转型中的地位与发展展望
黄维和 | 中国工程院院士
-
- 15:20-15:45 全球碳产业现状、技术进展与启示
Jarad Daniels | 全球碳捕集封存研究院首席执行官
-
- 15:45-16:00 会间茶歇
-
- 16:00-16:25 油气行业节能环保产业发展展望与技术路径
周爱国 | 中国石油QHSE首席专家
-
- 16:25-16:50 绿色低碳背景下我国油气行业转型发展机制与政策建议
杨 雷 | 北京大学国际能源研究院副院长
-
- 16:50-17:30 圆桌讨论

Sub-forums

I

Forum on Green and Low-carbon Transition, Development and Technology Innovation in the Oil & Gas Industry

Venue: Lecture Hall, F/3, Block D

Moderator: Tan Tianwei, Academician of Chinese Academy of Engineering

-
- 14:30-14:55** **Digital Transition, Intellectual Development and Prospect of the Oil & Gas Industry**
Liu He | Academician of Chinese Academy of Engineering
-
- 14:55-15:20** **The Role and Development Prospects of Natural Gas in China's Energy Transition**
Huang Weihe | Academician of Chinese Academy of Engineering
-
- 15:20-15:45** **The Development Status, Technical Progress and Enlightenment on the Global Carbon Industry**
Jarad Daniels | Chief Executive Officer of Global CCS Institute
-
- 15:45-16:00** **Tea Break**
-
- 16:00-16:25** **Outlook and Technology development of Energy-conservation in the Oil & Gas Industry**
Zhou Aiguo | Chief Expert on QHSE of China National Petroleum Corporation
-
- 16:25-16:50** **Institutional Mechanisms and Policy Suggestions for the Transition of China's Oil and Gas Industry in the Context of Green and Low-carbon Development**
Yang Lei | Deputy Director of Institute of Energy, Peking University
-
- 16:50-17:30** **Round Table Discussion**





专题分论坛

2

新能源与可再生能源发展与 科技创新论坛

论坛地点：D座三层6号会议室

主持人：邹才能，中国科学院院士

14:30-14:55 双碳目标下储能技术的发展与展望
成会明 | 中国科学院院士

14:55-15:20 双碳目标下太阳能等新能源发展前景与技术创新
李美成 | 华北电力大学新能源学院院长

15:20-15:45 中国氢能源与燃料电池发展战略研究
彭苏萍 | 中国工程院院士

15:45-16:00 会间茶歇

16:00-16:25 绿色化学与可持续发展
韩布兴 | 中国科学院院士

16:25-16:50 华为数字技术助力智慧能源发展
方良周 | 华为数字能源副总裁

16:50-17:30 圆桌讨论



Sub-forums

II

Forum on New Energy and Renewable Energy Development and Technology Innovation

Venue: No. 6 Conference Room, F/3, Block D

Moderator: **Zou Caineng**, Academician of Chinese Academy of Sciences

-
- 14:30-14:55** **Energy Storage Technologies: Development and Outlook under Carbon Peaking and Carbon Neutrality Goals**
Cheng Huiming | Academician of Chinese Academy of Sciences
-
- 14:55-15:20** **Outlook and Technological Innovation of New Energy (Solar) under Carbon Peaking and Carbon Neutrality Goals**
Li Meicheng | Dean of School of New Energy, North China Electric Power University
-
- 15:20-15:45** **Development Strategies on Hydrogen Energy and Fuel Cells in China**
Peng Suping | Academician of Chinese Academy of Engineering
-
- 15:45-16:00** **Tea Break**
-
- 16:00-16:25** **Green Chemistry and Sustainable Development**
Han Buxing | Academician of Chinese Academy of Sciences
-
- 16:25-16:50** **Huawei Digital Technology Empowers Intelligent Energy Development**
Fang Liangzhou | Vice President of Huawei Digital Power
-
- 16:50-17:30** **Round Table Discussion**





专题分论坛

3

石化行业绿色低碳转型发展与创新论坛

论坛地点：D座一层18号会议室

主持人：徐春明，中国科学院院士

-
- 14:30-14:50 未来的高分子材料低碳发展途径
王玉忠 | 中国工程院院士
-
- 14:50-15:10 数实融合助力石化工业数字化转型
钱 锋 | 中国工程院院士
-
- 15:10-15:30 若干基础化学品低碳制造技术及展望
任其龙 | 中国工程院院士
-
- 15:30-15:50 中国石油炼化工业业务绿色低碳发展创新与实践
杨卫胜 | 中国石油集团石油化工研究院院长
-
- 15:50-16:10 会间茶歇
-
- 16:10-16:30 石化工业过程电气化，引领低碳未来
Andrew Howell | 英国 KBC 公司科技执行副总裁
-
- 16:30-16:50 双碳背景下的石化行业挑战机遇与科技创新展望
谢在库 | 中国科学院院士
-
- 16:50-17:30 圆桌讨论

Sub-forums



Forum on the Green and Low-carbon Transition, Development and Technology Innovation of the Petrochemical Industry

Venue: No. 18 Conference Room, F/1, Block D

Moderator: Xu Chunming, Academician of Chinese Academy of Sciences

-
- 14:30-14:50** **Low-carbon Development Path of Polymer Materials**
Wang Yuzhong | Academician of Chinese Academy of Engineering
-
- 14:50-15:10** **The Integration of Digital and the Real Economy Boosts the Digital Transition of the Petrochemical Industry**
Qian Feng | Academician of Chinese Academy of Engineering
-
- 15:10-15:30** **Low-carbon Manufacturing Technology and Development Outlook for Basic Chemicals**
Ren Qilong | Academician of Chinese Academy of Engineering
-
- 15:30-15:50** **Innovation and Practice of Green and Low-carbon Development in PetroChina's Refining and Chemicals Business**
Yang Weisheng | President of PetroChina Petrochemical Research Institute
-
- 15:50-16:10** **Tea Break**
-
- 16:10-16:30** **Process Electrification in the Petrochemical Industry Leading to A Low-carbon Future**
Andrew Howell | Executive Vice President of KBC
-
- 16:30-16:50** **Challenges and Opportunities in the Petrochemical Industry under Dual Carbon Goals and the Outlook of Scientific and Technological Innovation**
Xie Zaiku | Academician of Chinese Academy of Sciences
-
- 16:50-17:30** **Round Table Discussion**

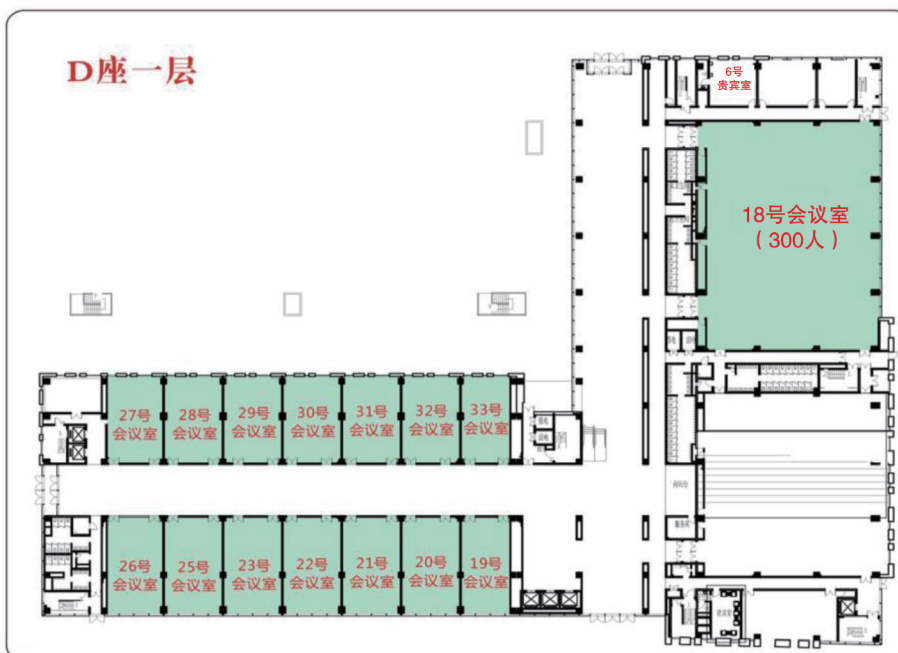
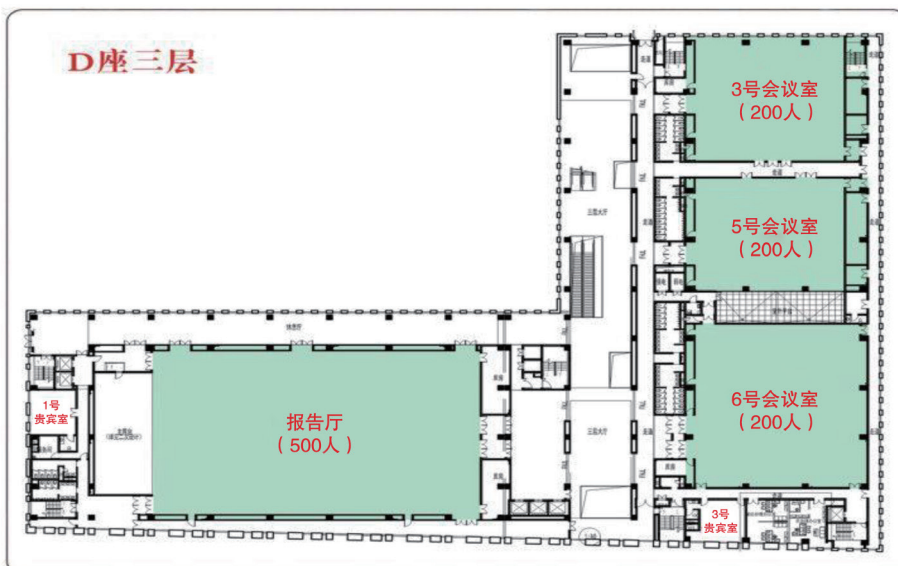


会议场所平面示意图

Plan of Conference Venues



石油科技交流中心
CNPC Sci-Tech Exchange Center



会场交通示意图

Traffic Map



石油科技交流中心
CNPC Sci-Tech Exchange Center





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