

# THE FIFTH FUTURE ENERGY CONVEN 第五届 未来能源大会

2023.09.11-14

中国·武进

September 11-14, 2023 Wujin, China

# 绿巴·持续·共生·向新

GREEN / SUSTAINABLE / SYMBIOTIC / FORWARD-LOOKING

探索未来,推动能源可持续发展

Exploring the Future, Promoting Sustainable Energy Development









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常州市人民政府



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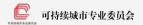












常州新能源产教联合体

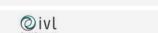






















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CERS DE 中国能源研究会 分布式能源专业委员会



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# 参会指南

#### 尊敬的各位嘉宾:

感谢您莅临参加第五届未来能源大会。为确保参会顺利,我们提供以下参会须知,请仔细阅读:

#### 一、参会凭证

参会证件将是您出入会场的唯一凭证,参加会议及同期活动,请全程佩戴,仅限本人使用,请妥善保管。

#### 二、会议场地

会议主要举行在常州新城希尔顿酒店的二层新城大宴会厅和帝景厅。请查阅会场平面图以了解布局。

#### 三、会议议程

为了使您充分了解会议日程安排,请参考以下重要的会议时间表:

#### 9月12日

- 15:00-18:00: 未来能源 CTO 论坛 (新城厅)
- 18:30-20:30: 欢迎晚宴 (帝景厅)

#### 9月13日

- 09:00-12:15: 主论坛: 开幕致辞、院士论坛、高端对话 (新城厅)
- 13:00-18:00: 未来能源国际论坛、机构交流 (新城厅)
- 14:00-15:30: 未来能源青年论坛 (帝景厅)
- 18:00-20:00: 酒店一层 OPEN 自助餐厅

#### 9月14日

- 上午 09:00-12:00:
  - 专题论坛一: 碳中和产业合作论坛(帝景厅)
  - 专题论坛二:清洁能源技术创新论坛 (新城大宴会厅 BC)
  - 专题论坛三: 氢能技术与应用发展论坛 (新城大宴会厅 A)
- 下午 14:00-17:00:
  - 专题论坛四:绿色金融与可持续投资论坛(帝景厅)
  - 专题论坛五:能源数字化智能化论坛 (新城大宴会厅 BC)
  - 专题论坛六: 城市能源与智慧交通创新论坛 (新城大宴会厅 A)

#### 四、同传设备

为了更好地满足您的需求,大会为参会嘉宾提供了同传设备,以便您更好地理解并参与会议的讨论。请在需要时 向工作人员索取同传设备,也可扫描会刊封底二维码,佩戴个人耳机收听同传。

#### 五、用餐安排

洒店一层提供 OPEN 自助餐厅

#### 六、会场规定

为了维护会场的舒适和安全,请不要在酒店及会场内吸烟。

请遵守公共卫生须知和酒店安防需求,共同保持良好的会议环境。

如果您在会议期间有任何疑问或需要帮助,我们的工作人员将随时为您提供支持。

再次感谢您的参与,我们期待与您一同共享未来能源领域的精彩时刻。

# **Conference Guide**

#### **Respected Guests:**

Thank you for attending the 5th Future Energy Convention. To ensure your smooth participation, we provide the following attendance instructions for your careful consideration:

#### I. Attendance Credentials:

Your attendance credentials will be the only document for your access to the venue. Please wear them throughout the conference. These credentials are for personal use only; please keep them secure.

#### II. Conference Venue:

The conference primarily takes place in the Hilton Changzhou on the second floor in the Futureland Grand Ballroom and Empire Ballrooml. Please refer to the venue floor plan for layout details.

#### III. Conference Agenda:

To help you stay informed about the conference schedule, please refer to the following important timetable:

September 12th

- 15:00-18:00: Future Energy CTO Forum (Futureland Grand Ballroom)
- 18:30-20:30: Welcome Dinner (Empire Ballroom)

September 13th

- 09:00-12:15: Main Forum: Opening Address, Academician Forum, High-level Dialogue (Futureland Grand Ballroom)
- 13:00-18:00: Future Energy International Forum, Institutional Exchange (Futureland Grand Ballroom)
- 14:00-15:30: Future Energy Youth Forum (Empire Ballroom)
- 18:00-20:00: OPEN Buffet Restaurant on the hotel's first floor

September 14th

Morning 09:00-12:00:

- Special Forum 1: Carbon Neutrality Industrial Cooperation Forum (Empire Ballroom)
- Special Forum 2: Clean Energy Technology Innovation Forum (Futureland Grand Ballroom BC)
- Special Forum 3: Hydrogen Energy Technology and Application Development Forum (Futureland Grand Ballroom A)

Afternoon 14:00-17:00:

- Special Forum 4: Green Finance and Sustainable Investment Forum (Empire Ballroom Hall)
- Special Forum 5: Energy Digitalization and Intelligence Forum (Futureland Grand Ballroom BC)
- Special Forum 6: Urban Energy and Smart Transportation Innovation Forum (Futureland Grand Ballroom A)

#### IV. Simultaneous Interpretation Equipment

To better cater to your needs, the conference provides simultaneous interpretation equipment for our distinguished guests. Please feel free to request the equipment from our staff whenever you require it. You can also scan the QR code on the back cover of the conference materials and wear personal headphones to listen to the simultaneous interpretation.

#### V. Dining Arrangements

The hotel's first floor hosts an OPEN Buffet Restaurant where meals will be served.

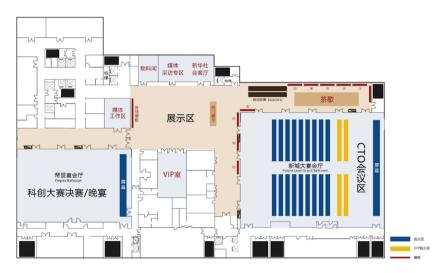
#### VI. Venue Regulations

To maintain a comfortable and safe environment within the conference venue and hotel, smoking is strictly prohibited. Kindly adhere to public health guidelines and hotel security requirements to collectively uphold a pleasant conference atmosphere.

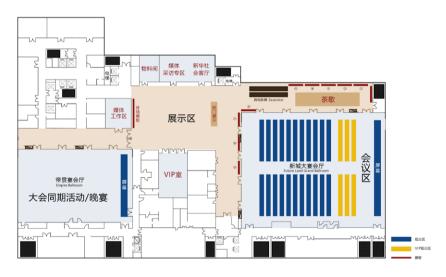
If you have any questions or require assistance during the conference, our staff will be readily available to support you. Once again, we express our gratitude for your participation, and we look forward to sharing splendid moments in the field of future energy with you.

# 会场布局

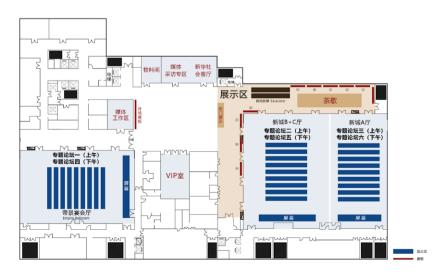
#### 9月12日 星期二: 未来能源科创大赛/未来能源全球CTO论坛



### 9月13日 星期三: 未来能源高峰论坛 (开幕式/院士论坛/国际论坛)

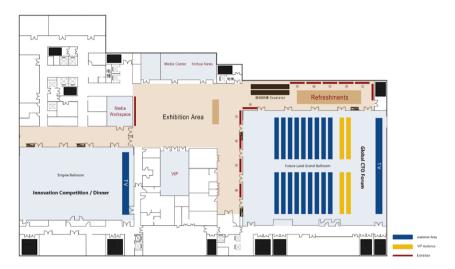


#### 9月14日未来能源专题论坛

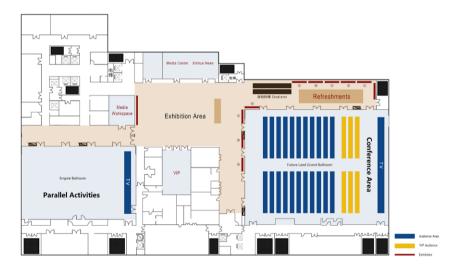


# **Venue Layout**

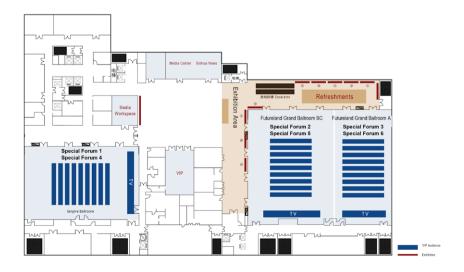
September 12, Tuesday: Future Energy Innovation and Entrepreneurship Competition / Future Energy Global CTO Forum



September 13th, Wednesday: Future Energy Summit Forum (Opening Ceremony / Academician Forum / International Forum)

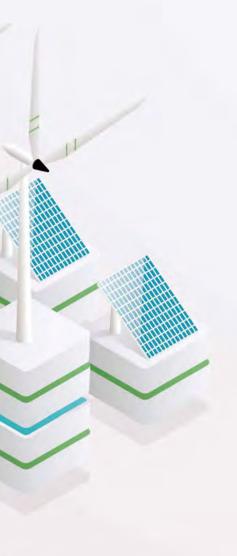


September 14th, Thursday, Future Energy Special Forums









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大会背景

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大会议程 Agenda

常州概况, 武进印象

# 大会背景

党的二十大报告指出,要积极稳妥推进碳达峰、碳中和,深入推进能源革命,加快规划建设新型能源体系。面临新时代我国社会主要矛盾的历史性转变和经济社会发展动能转换的时代机遇,构建更加多元、绿色、可持续的新型能源体系成为能源产业实现战略性、整体性转型的当务之急。

当前,全球新一轮科技革命和产业变革蓬勃兴起,前瞻性、创新型能源技术快速兴起,新业态、新模式持续涌现,成为全球能源转型变革的核心驱动力。"十四五"期间,我国亟须加快推动能源产业基础高级化、产业链现代化,进一步激发能源创新发展新动能。

# 会议主题

绿色・持续・共生・向新

探索未来,推动能源可持续发展

# 关于未来 能源大会

未来能源大会创始于 2018 年,致力于构建高层次、专业性、国际化的 跨界合作平台,开展学术与技术交流,探讨和分享从"传统能源"向"未来能源"变革趋势下的智慧成果,促进全球能源协调、高效和可持续发展。

第五届未来能源大会(FEC2023)作为中国科学技术协会重要学术会议,由中国能源研究会、常州市人民政府、江苏省工业和信息化厅、中国能源网主办,常州市武进区人民政府、中国能源研究会双碳产业合作分会,中国能源研究会分布式能源专业委员会,北京中能网讯咨询有限公司承办。大会聚焦未来能源发展趋势和创新技术,探讨可持续能源和绿色发展的关键问题。通过论坛、科创大赛、展览展示、成果发布、项目推介等活动,邀请政府主管部门、国内外专家学者、国际机构组织、商协会、企业等各界人士,共同探讨未来能源的新机遇、新挑战和新方向,为推动可持续能源未来作出贡献。

# Convention Background

The 20th National Congress of the Communist Party of China pointed out the need to actively and steadily advance carbon peaking and carbon neutrality, thoroughly promote energy revolution, and accelerate the planning and construction of a new energy system. Faced with the historic shift in the principal contradiction of Chinese society in the new era and the transformation of economic and social development momentum, the urgent task is to construct a more diversified, green, and sustainable new energy system, becoming the strategic and holistic transformation of the energy industry. At present, a new round of global technological revolution and industrial transformation is flourishing. Forward-looking and disruptive energy technologies are rapidly emerging, and new forms and models continue to emerge, becoming the core driving forces of global energy transformation. In the "14th Five-Year Plan" period, it is imperative to accelerate the advancement of the foundation and modernization of the energy industry and its supply chain, further stimulating new energy development driven by innovation.

# Convention Theme

GREEN, SUSTAINABLE, SYMBIOTIC, FORWARD-LOOKING Exploring the Future, Promoting Sustainable Energy Development

# **About the Convention**

The Future Energy Convention (FEC), initiated in 2018, is dedicated to building a high-level, professional, and international interdisciplinary cooperation platform. It facilitates academic and technical exchanges, discussions, and sharing of intelligent achievements under the trend of transition from "traditional energy" to "future energy" promoting global energy coordination, efficiency, and sustainability. The 5th Future Energy Convention (FEC2023), as an important academic conference of the China Association for Science and Technology, is hosted by the China Energy Research Society, Changzhou Municipal People's Government, Industry and Information Technology Department of Jiangsu and China Energy Net, with the joint support of the People's Government of Wujin District, Changzhou City. The conference focuses on the trends of future energy development and innovative technologies, discussing key issues of sustainable energy and green development. It invites government authorities, domestic and foreign experts and scholars, international institutions, chambers of commerce, enterprises, and representatives from various fields to jointly explore new opportunities, challenges, and directions for the future energy, contributing to the advancement of sustainable energy.

# 全球CTO论坛

# 能源技术创新与可持续发展

(2) 2023年9月12日(星期二)

② 常州新城希尔顿酒店 - 新城大宴会厅

# 主题发言

主持人: 周大地 国家发展改革委能源研究所原所长

叶 凡 明阳智慧能源集团副总裁兼首席营销官 15:00-16:30

薄 扬 全球高级副总裁 巴斯夫大中华区营运与基地管理

晏成林 常州大学副校长

冯志强 天合光能股份有限公司副总裁、光伏科学与技术国家重点实验室主任

侯 越 理想汽车增程产品线高级总监

# **Global CTO Forum**

# **Energy Technology Innovation and Sustainable Development**



September 12, 2023 (Tuesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

# **Keynote Speeches**

Moderator: Zhou Dadi, Former Director, Energy Research Institute of National Development and Reform Commission(NDRC)

15:00-16:30 Ye Fan, Vice President and Chief Marketing Officer, Mingyang Smart Energy

Jan Peter Bredehöft, Senior Vice President, Operations and Site Management Greater China, BASF

Yan Chenglin, Vice President of Changzhou University

Feng Zhiqiang, Vice President, Trina Solar

Hou Yue, Senior Director of Extended-Range at Li Auto

# 主题发言

#### 主持人



#### **周大地** 国家发展改革委能源研究所原所长

从事能源经济、能源政策和能源系统分析研究,在我国能源进口政策、能源价格改革、能源结构优质化、能源效率等方面均有深入研究,并在可持续能源发展、 全球气候变化等问题方面在国内外能源研究界享有盛誉。

#### 发言嘉宾



#### **叶 ,** 明阳智慧能源集团副总裁兼首席营销官

长期以来一直从事海陆风电机组的开发与研究工作,曾先后担任明阳智能大风机市场总监、风能设计院大兆瓦风机系统设计总工的职位,参与了陆上公司 1.5-4.0 兆瓦级别风机产品的开发和大型风电场基地项目的规划设计、建设和评估的工作。



## 描 场 全球高级副总裁 巴斯夫大中华区营运与基地管理

德国多特蒙德应用技术大学化学工程硕士,曼海姆大学 MBA。1999 年毕业加入 德国巴斯夫集团,于 2022 年 9 月任巴斯夫大中华区高级副总裁。



## 晏成林 常州大学副校长

国家重大领军人才项目入选者,常州大学副校长,历任苏州大学能源学院院长、苏州大学张家港工业技术研究院院长。主要从事新能源新材料领域的研究开发工作。主持参与国家科技部重点研发计划课题、国家基金委联合基金重点项目、军委科技委课题等 30 多项。

# **Keynote Speeches**

Moderator

#### **Zhou Dadi**

# Former Director, Energy Research Institute of National Development and Reform Commission(NDRC)

He has been engaged in research on energy economics, energy policy, and energy system analysis. He has conducted indepth research on China's energy import policy, energy price reform, energy structure optimization, and energy efficiency. He is well-regarded in both domestic and international energy research circles for his expertise in sustainable energy development, global climate change, and other related issues.

Keynote Speeches

#### Ye Fan

#### Vice President and Chief Marketing Officer, Mingyang Smart Energy

Ye Fan, currently Vice President and Chief Marketing Officer of Mingyang Smart Energy, has been engaged in the R&D of onshore and offshore wind turbine generators (WTGs) since graduation in 2008.He has successively served as the market director and chief design engineer of large MW WTGs system of the Design Institute. He participated in the development of 1.5-4.0 MW onshore wind WTGs and the design, construction and evaluation of large-scale wind farms.

#### Jan Peter Bredehöft

#### Senior Vice President, Operations and Site Management Greater China, BASF

Mr. Jan Peter Bredehöft holds a Master's degree in Chemical Engineering from the University of Dortmund, Germany, and an MBA from the University of Mannheim. 1999 joining BASF in Germany, transferred to Senior Vice President of BASF Greater China in September 2022.

# **Yan Chenglin**

#### Vice President of Changzhou University

He is a participant in the national major leadership talent project and serves as the Vice President of Changzhou University. He has previously held positions as the Dean of the Energy Institute at Suzhou University and the Director of the Zhangjiagang Industrial Technology Research Institute at Suzhou University. His main focus is on research and development in the field of new energy and new materials. He has led more than 30 projects, including those funded by the National Key Research and Development Program of the Ministry of Science and Technology, the Joint Fund Key Project of the National Natural Science Foundation of China, and projects from the Military Commission's Science and Technology Commission.



历任常州天合光能有限公司技术发展部电池技术高级经理、副总监、总监、技术发展部高级总监、副总裁、光伏科学与技术国家重点实验室主任。拥有近30年半导体工艺工程技术和晶体硅太阳能电池工艺技术研发经验。

#### 侯 越 理想汽车增程产品线高级总监

# **Feng Zhiqiang**

#### Vice President, Trina Solar

Vice President of Trina Solar, Director of the National Key Laboratory of Photovoltaic Science and Technology, Deputy Director of the Yangtze River Delta Solar Photovoltaic Technology Innovation Center. Possessing nearly 30 years of experience in semiconductor process engineering and crystalline silicon solar cell process technology research and development.

## **Hou Yue**

Senior Director of Extended-Range at Li Auto

# 全球CTO论坛

# 能源技术创新与可持续发展

2023年9月12日(星期二)

② 常州新城希尔顿酒店 - 新城大宴会厅

# 圆桌对话

——能源技术创新与可持续发展

主持人: 黄少中 中国能源研究会双碳产业合作分会主任、国家能源局西北监管局原局长

16:30-17:30 对话嘉宾:

冯志强 天合光能股份有限公司副总裁、光伏科学与技术国家重点实验室主任

王世宏 协鑫能源科技股份有限公司执行副总裁

吴小平 通威新能源有限公司常务副总经理、CTO

陈摄军 纬景储能科技有限公司联合创始人、副总裁

欧阳洲 珠海仪能科技有限公司副总工程师

李宏庆 万帮数字能源股份有限公司产品 BG 总裁

张传兵 南京远大能源科技有限公司董事长

17:30-18:00 自由交流 / 合影留念 / 科创大赛颁奖仪式

18:30-20:30 欢迎晚宴

# **Global CTO Forum**

# **Energy Technology Innovation and Sustainable Development**



September 12, 2023 (Tuesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

## **Round-table**

#### **Energy Technology Innovation and Sustainable Development**

Moderator: Huang Shaozhong, Director, Dual-Carbon Industry Cooperation Branch of China Energy Research Society

16:30-17:30 **Panelists:** 

Feng Zhiqiang, Vice President, Trina Solar

Wang Shihong, Executive Vice President, GCL Energy Technology

Wu Xiaoping, Executive Vice President, Tongwei New Energy

Daniel Chan, Founder, VP, WeView Energy Storage Technology

Ouyang Zhou, Deputy Chief Engineer, ENACS

**Li Hongqing**, President of the Product Business Group, StarCharge

Zhang Chuanbing, Chairman of Nanjing Bread Energy Technology

17:30-18:00 **Q&A, Group Photo Time, Technology Innovation Contest Award Ceremony** 

**Welcome Dinner** 18:30-20:30

# 圆桌对话

#### 主持人



**黄少中** 中国能源研究会双碳产业合作分会主任 国家能源局西北监管局原局长

中国能源研究会研究员、中国能源研究会双碳产业合作分会主任、高级经济师、高级会计师、世界银行高级专家、国家能源局西北监管局原局长。

对话嘉宾



历任常州天合光能有限公司技术发展部电池技术高级经理、副总监、总监、技术发展部高级总监、副总裁、光伏科学与技术国家重点实验室主任。拥有近30年半导体工艺工程技术和晶体硅太阳能电池工艺技术研发经验。



王世宏 协鑫能源科技股份有限公司执行副总裁

现任协鑫能源科技股份有限公司党委副书记、纪委书记、执行总裁, 江苏省电力行业协会副理事长。长期从事电力生产和经营管理工作, 国内气电领域的资深专家, 在气电一体化生产和经营管理方面具有丰富的理论和实践经验。



吴小平 通威新能源有限公司常务副总经理、CTO

中国光伏行业协会标准化技术委员会委员、清华大学水沙科学与水利水电工程国家重点实验室特聘研究员。



陈摄军 纬景储能科技有限公司联合创始人、副总裁

35年的电力行业从业经验,曾参与并主导多个国际、国家级电力项目。早在90年代开始与海外新能源、节能和环保的技术公司接洽,并陆续成功引进了多项成熟的欧美技术。

## **Round-table**

Moderator

# **Huang Shaozhong**

#### Director, Dual-Carbon Industry Cooperation Branch of China Energy Research Society

Researcher at China Energy Research Society, Director of the Carbon Neutrality Industry Cooperation Sub-Committee of China Energy Research Society, Senior Economist, Senior Accountant, Senior Expert at the World Bank, Former Director of Northwest Supervision Bureau of the National Energy Administration.

**Panelists** 

## **Feng Zhiqiang**

#### Vice President, Trina Solar

Vice President of Trina Solar, Director of the National Key Laboratory of Photovoltaic Science and Technology, Deputy Director of the Yangtze River Delta Solar Photovoltaic Technology Innovation Center. Possessing nearly 30 years of experience in semiconductor process engineering and crystalline silicon solar cell process technology research and development.

# Wang Shihong

#### **Executive Vice President, GCL Energy Technology**

Engaged in electricity production and operational management for an extended period, he is a senior expert in the domestic gas and electricity sector, possessing abundant theoretical and practical experience in integrated gas and electricity production and operational management.

# **Wu Xiaoping**

#### **Executive Vice President, Tongwei New Energy**

Member of the Standardization Technical Committee of China Photovoltaic Industry Association, Distinguished Researcher at the State Key Laboratory of Hydroscience and Engineering at Tsinghua University.

#### **Daniel Chan**

#### Founder, VP, WeView Energy Storage Technology

Daniel Chan has 35 years of experience in power industry and has led a number of international and national power projects. As early as the 1990s, Daniel began to contact overseas new energy, energy-saving and environmental protection technology companies, accumulated understanding of the leading position of related technologies, and successfully introduced a number of mature European and American technologies for China successively, opening the curtain on the development of the domestic energy storage industry.

# 圆桌对话



#### **欧阳洲** 珠海仪能科技有限公司副总工程师

西安理工大学硕士,珠海仪能副总工程师,主持企业 3 项大型软件项目开发,其中 2 项已完成产业化,有丰富的大型软件项目开发经验。极为擅长嵌入式电子设备软件的开发,主持开发的相关产品达 10 余项。



# 李宏庆 万帮数字能源股份有限公司产品 BG 总裁

拥有超过 15 年移动通信系统行业经验,超过 5 年数字能源行业经验。现任星星充电高级副总裁,星星充电产品研发中心 COO,负责充电产品线产品规划和经营工作,研发平台建设工作,负责中国区解决方案工作。



# 张传兵 南京远大能源科技有限公司董事长

江苏省绿色建筑协会建筑环境与高效能源应用专委会副主委。主持投资、建设、运营 500 万平方米的区域供能系统,20 余家医院合同能源管理的建设、改造经历,具有丰富的实践经验。

## **Round-table**

## **Ouyang Zhou**

#### **Deputy Chief Engineer, ENACS**

Ouyang Zhou, Deputy Chief Engineer at YINENG in Zhuhai, holds a master's degree from Xi'an University of Technology. He has led three major software development projects for the company, two of which have been successfully industrialized. He has extensive experience in the development of large-scale software projects and is particularly skilled in embedded electronic device software development. He has overseen the development of more than ten related products.

# Li Hongqing

#### President of the Product Business Group, StarCharge

With over 15 years of experience in the mobile communication systems industry and more than 5 years of experience in the digital energy industry, he currently serves as the Senior Vice President of StarCharge, as well as the COO of StarCharge's Product Development Center. He is responsible for product planning and operations in the charging product line, as well as research and development platform construction. Additionally, he oversees solution work in the China region.

# **Zhang Chuanbing**

#### **Chairman of Nanjing Bread Energy Technology**

Vice Chairman of the Special Committee on Building Environment and High-Efficiency Energy Application of Jiangsu Green Building Association. He has overseen the investment, construction, and operation of regional energy supply systems covering over 5 million square meters. With experience in the construction and renovation of energy management contracts for more than 20 hospitals, he possesses extensive practical experience.

# 高峰论坛

2023年9月13日(星期三)09:00-12:15

② 常州新城希尔顿酒店 - 新城大宴会厅

# 开幕致辞

#### 主持人: 孙正运 中国能源研究会副理事长兼秘书长

09:00-10:00 **致辞嘉宾:** 

常州市领导

中国能源研究会理事长 史玉波

江苏省工业和信息化厅领导

江苏省科学技术协会副主席 冯少东

中国能源网董事长 冯丽雯

# **Summit Forum**

September 13, 2023 (Wednesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

# **Opening Remarks**

Moderator: SUN Zhengyun, Vice Chairman and Secretary General, China Energy Research Society

09:00-10:00 **Opening Remarks** 

Leadership of Changzhou City

Chairman, China Energy Research Society, Shi Yubo

Officer of the Industry and Information Technology Department of Jiangsu

Vice President of Jiangsu Science and Technology Association, Feng Shaodong

Chairperson of China Energy Net, Feng Liwen

# 开幕致辞

主持人



**孙正运** 中国能源研究会副理事长兼秘书长

教授级高级工程师, 国务院特殊津贴专家。曾任国网河北省电力有限公司总经理、国网智能电网研究院院长、国家电网公司副总工程师兼西北分部主任、国家电网公司总信息师。现任中国能源研究会副理事长兼秘书长。

致辞嘉宾





史玉波 中国能源研究会理事长

教授级高级工程师。曾任国家能源局副局长(副部长级)、党组成员。现任中国能源研究会党委书记、理事长。长期从事能源电力研究管理工作,具有丰富的实践经验和深厚的理论功底。始终聚焦能源行业绿色低碳,积极推动能源转型升级以及国家能源政策的制定和落地。

## 江苏省工业和信息化厅领导



冯少东 江苏省科学技术协会副主席



冯丽雯 中国能源网董事长

现任中国能源网董事长,中国能源研究会碳中和产业合作中心副主任兼秘书长。 中国能源网创始人之一,毕业于北京工业大学机械工程,曾任职中科院力学研究所;后就读于美国麻省州立大学获得物理硕士及工程管理硕士学位。

# **Opening Remarks**

Moderator

## **Sun Zhengyun**

#### Vice Chairman and Secretary General, China Energy Research Society

Professor-level senior engineer. Enjoys a special allowance from the State Council of China. Formerly served as the General Manager of Hebei Provincial Power Company, Director of the State Grid Intelligent Research Institute, Deputy Chief Engineer of State Grid Corporation of China, and Director of the Northwest Division. Currently holds the positions of Vice Chairman and Secretary-General of the China Energy Research Society.

Speeches

## **Leadership of Changzhou City**

#### Shi Yubo

#### Chairman, China Energy Research Society

Professor-level senior engineer and currently serves as the Secretary of the Party Committee and Chairman of China Energy Research Society. He has long been engaged in energy and power research and management, possessing rich practical experience and deep theoretical foundation. He consistently focuses on green and low-carbon development in the energy industry, actively promotes energy transformation and upgrading, and contributes to the formulation and implementation of national energy policies.

# Officer of the Industry and Information Technology Department of Jiangsu

# Feng Shaodong

Vice President, Jiangsu Science and Technology Association

# **Feng Liwen**

#### President, China Energy Net

Currently serving as the Chairman of China Energy Net, Feng Liwen also holds the position of Deputy Director and Secretary-General of the Dual-Carbon Industry Cooperation Branch, China Energy Research Society. As one of the founders of China Energy Net, She graduated from Beijing University of Technology with a degree in Mechanical Engineering and previously worked at the Institute of Mechanics, Chinese Academy of Sciences. She furthered her education in the United States, earning master's degrees in Physics and Engineering Management from Massachusetts State University.

# 高峰论坛

2023年9月13日(星期三)09:00-12:15

◎ 常州新城希尔顿酒店 - 新城大宴会厅

# 院士论坛

#### 主持人: 李 政 清华大学气候变化与可持续发展研究院院长

10:00-11:15 主旨报告:

#### 构建新型能源体系和新型电力系统的研究和思考

周孝信 中国科学院院士、中国电力科学研究院名誉院长

#### 中国实现碳中和——挑战与路径分析

金之钧 中国科学院院士、北京大学能源研究院院长

#### 面向碳中和的储能技术

赵天寿 中国科学院院士、南方科技大学碳中和能源研究院院长

#### 新能源新材料未来发展前景(线上)

崔 屹 美国国家科学院院士、斯坦福大学能源研究所主任

# **Summit Forum**



September 13, 2023 (Wednesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

## **Academician Forum**

Moderator: Li Zheng, President, Institute of Climate Change and Sustainable Development, Tsinghua University

10:00-11:15 **Keynote Speeches**:

# Research and Thoughts on Developing Power System and Electricity System from New Energy Sources

**Zhou Xiaoxin**, Academician, Chinese Academy of Sciences Honorary President, China Electric Power Research Institute

#### **Achieving Carbon Neutrality in China: Challenges and Pathway Analysis**

**Jin Zhijun**, Academician of the Chinese Academy of Sciences

President, Energy Research Institute of Peking University

#### **Energy Storage for Carbon Neutrality**

**Zhao Tianshou**, Academician of the Chinese Academy of Sciences

Director of the Carbon Neutrality and Energy Research Institute at Southern University of Science and Technology.

#### **Prospects of New Energy and New Material(Online)**

**Yi Cui**, Member, National Academy of Sciences(U.S.)

Director, Precourt Institute for Energy, Stanford University

# 院士论坛

#### 主持人



## 李 政 清华大学气候变化与可持续发展研究院院长

清华大学气候变化与可持续发展研究院院长、低碳能源实验室主任,世界大学 气候变化联盟秘书长。从事能源动力动态建模与仿真技术,火电厂智能发电技术, 能源系统低碳转型战略及路径,应对气候变化战略和政策等研究。

#### 主旨报告



# 周孝信 中国科学院院士、中国电力科学研究院名誉院长

电力系统专家,中国科学院院士,美国国家工程院外籍院士,IEEE Fellow,教授级高级工程师、博士生导师。中国电力科学研究院名誉院长。长期从事电力系统分析和控制的数学模型和计算方法研究。



## 金之钧 中国科学院院士、北京大学能源研究院院长

中国科学院院士,俄罗斯自然科学院外籍院士,俄罗斯科学院外籍院士。致力于全球能源战略研究,以及中国碳中和基础理论、技术及实现路径的研究工作,在地质碳汇、CCUS 技术等方面取得积极的进展。



## **赵天寿** 中国科学院院士、南方科技大学碳中和能源研究院院长

能源科学与工程热物理专家,持续研究新能源储能理论、技术及应用 30 余年。 以热物理与电化学学科交叉为主线,建立了流体电池热质传递 - 电化学反应耦 合理论,提出了液态电能载体储能新方法,取得了系统的创新成果。



## 崔 屹 美国国家科学院院士、斯坦福大学能源研究所主任

崔屹研究纳米材料的基础和应用,并开发用于纳米材料的工具。研究方向:纳米技术、电池、电催化、可穿戴设备、二维材料、环境技术(水、空气、土壤)、低温电子显微镜。

# **Academician Forum**

Moderator

## Li Zheng

#### President, Institute of Climate Change and Sustainable Development, Tsinghua University

Director of Laboratory of Low Carbon Energy Tsinghua University, and Secretary-general of the Global Alliance of Universities on Climate. He has long been engaged in energy system analysis, low carbon development and climate change policy and strategy study, and mathematical modeling and simulation of thermal power equipment and system, optimization and fault diagnosis of thermal power plant and distributed energy system.

**Keynote Speeches** 

#### **Zhou Xiaoxin**

#### Academician, Chinese Academy of Sciences Honorary President, China Electric Power Research Institute

Power system expert, Academician of the Chinese Academy of Sciences, Foreign academician of the U.S. National Academy of Engineering, IEEE Fellow, Professor-level senior engineer, and doctoral supervisor. Honorary President of the China Electric Power Research Institute. Engaged in long-term research on mathematical models and computational methods for power system analysis and control.

## Jin Zhijun

# Academician of the Chinese Academy of Sciences President, Peking University Energy Research Institute

Academician of the Chinese Academy of Sciences, foreign member of the Russian Academy of Sciences, foreign member of the Russian Academy of Natural Sciences. Committed to global energy strategic research, as well as research on the basic theory, technology, and implementation path of carbon neutrality in China. He has made positive progress in areas such as geological carbon sinks and CCUS technology.

## **Zhao Tianshou**

# Academician of the Chinese Academy of Sciences Director of the Carbon Neutrality and Energy Research Institute at Southern University of Science and Technology.

Energy science and engineering thermophysics expert with over 30 years of continuous research in the theory, technology, and application of new energy storage. With a focus on the intersection of thermophysics and electrochemistry, he has established a theory of coupled heat transfer and electrochemical reactions in flow batteries, proposed a new method for energy storage using liquid energy carriers, and achieved innovative results in the field.

#### Yi Cui

Member, National Academy of Sciences(U.S.)

Director, Precourt Institute for Energy, Stanford University

Cui studies fundamentals and applications of nanomaterials and develops tools for their understanding. Research Interests: nanotechnology, batteries, electrocatalysis, wearables, 2D materials, environmental technology (water, air, soil), cryogenic electron microscopy.

# 高峰论坛

(2) 2023年9月13日(星期三)09:00-12:15

② 常州新城希尔顿酒店 - 新城大宴会厅

# 高端对话

——从传统到未来—共识与行动

主持人: 孙贤胜 中国能源研究会双碳产业合作分会副主任、国际能源论坛原秘书长

11:15-12:15 特邀报告:新能源作为新型能源系统的可行性和优越性

朱云来 中国国际金融股份有限公司原总裁兼首席执行官

#### 对话嘉宾:

朱云来 中国国际金融股份有限公司原总裁兼首席执行官

李雅兰 国际燃气联盟(IGU)主席

王 洁 施耐德电气中国副总裁

Ulf Henning Richter CARBON10BX Limited (HK) 创始人及行政总裁

James Spencer Exus North America Management Partners 管理合伙人

12:15-13:30 午餐

# **Summit Forum**

(L)

September 13, 2023 (Wednesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

# **Summit Dialogues**

#### From Traditional to the Future-Consensus and Actions

**Moderator: Sun Xiansheng,** Deputy Director, Dual-Carbon Industry Cooperation Branch, China Energy Research Society Former Secretary-General, International Energy Forum

11:15-12:15 **Distinguished presentation:** 

Feasibility and Advantages of New Energy in the New Energy System

Levin Zhu, Former President and CEO, China International Capital Corporation(CICC)

#### **Panelists:**

Levin Zhu, Former President and CEO, China International Capital Corporation(CICC)

Li Yalan, President, Council of the International Gas Union (IGU)

Wang Jie, Vice President, Schneider Electric China

Ulf Henning Richter, Founder & CEO, CARBON10BX Limited HK

James Spencer, Managing Partner, Exus North America Management Partners

12:15-13:30 **Lunch Break** 

# 高端对话

#### 主持人



**孙贤胜** 中国能源研究会双碳产业合作分会副主任 国际能源论坛原秘书长

参与了中国能源五年规划编制与重大政策制定,拥有超过30年的油气行业工作经验,积累了丰富的实际产业经验,包括油气生产、贸易和管道建设等各个方面。

特激报告



#### 朱云来 中国国际金融股份有限公司原总裁兼首席执行官

曾就读于南京气象学院大气物理学专业,后赴美国深造。美国威斯康星大学大气物理学博士。芝加哥德保罗大学会计硕士,瑞士信贷第一波士顿国际银行家学院工商管理硕士。曾任中国国际金融有限公司总裁兼首席执行官。

对话嘉宾



## 李雅兰 国际燃气联盟(IGU)主席

曾任北京控股集团有限公司党委常委、副总经理;北京燃气集团党委书记、董事长,现任国际燃气联盟(IGU)2022~2025年任期主席,2025~2028年还将担任IGU副主席。在燃气行业有三十多年的工作经历,曾入选"改革开放40年、能源领袖40人"。



## 王 洁 施耐德电气 副总裁

毕业于法国国家应用科学学院,并于 2003 年获 MBA 学位。现任施耐德电气副总裁,负责中国区公司事务及可持续发展。1996 年加入施耐德电气,后任施耐德电气中国区副总裁。

# **Summit Dialogues**

Moderator

## **Sun Xiansheng**

# Deputy Director, Dual-Carbon Industry Cooperation Branch, China Energy Research Society Former Secretary-General, International Energy Forum

He was deeply involved in the Chinese energy five-year plan and many other major policies. With more than 30 years of oil & gas industry working experience, he accumulated practical industry experience in oil and gas production, trading and pipeline construction. He once worked as Chairman of CNPC subsidiary company in Sudan, South Sudan and the countries in Central Asia, and participated in the negotiations with OPEC twice.

Distinguished presentation

#### Levin Zhu

#### Former President and CEO, China International Capital Corporation(CICC)

Studied Atmospheric Physics at Nanjing University of Information Science and Technology, then pursued further education in the United States. Earned a Ph.D. in Atmospheric Physics from the University of Wisconsin, an M.S. in Accountancy from DePaul University in Chicago, and an M.B.A. from the Credit Suisse First Boston International Bankers Institute in Switzerland. Formerly served as the President and CEO of China International Capital Corporation.

**Panelists** 

#### Li Yalan

#### President, Council of the International Gas Union (IGU)

Madame Li Yalan was a member of the Standing Committee of the CPC Committee and Deputy General Manager of Beijing Enterprises Group Co., Ltd., the Secretary of the CPC Committee and the Chairperson of Beijing Gas Group Co., Ltd. She is currently the President of International Gas Union (IGU) for the 2022-2025 term and will also serve as the Vice President from 2025-2028. Madame Li Yalan is the first Chinese and also the first female President of IGU. She has more the 30 years of experience working in the gas industry. She has been awarded as one of the "40 energy sector leaders in the 40 years of reform and opening-up in China".

## **Wang Jie**

#### Vice President, Schneider Electric China

WANG Jie is currently the Vice President of Schneider Electric China and has responsibility for Corporate Affairs and Sustainability Development. Since joining Schneider Electric China in 1996, and then became the Vice President of Schneider Electric China. Wang Jie has spent six years teaching in Beijing University of Science and Technology and then joined Alcatel China in 1991. Wang Jie graduated from Institut National des Sciences Appliquées (INSA) in 1984 and got an MBA in 2003.



# Ulf Henning Richter CARBON10BX Limited (HK) 创始人及行政总裁

Ulf Henning Richter 博士是一位教授、作家和连续企业家。他的研究领域包括可持续发展、气候和能源弹性、ESG 和全球正义。他是 CARBON10B X 的创始人兼首席执行官,专注于基于自然的解决方案,从而生成碳信用额度和可再生能源证书,以支持政府和跨国公司遵守当地和国际法规,以科学为基础的净零目标。



# James Spencer Exus North America Management Partners 管理合伙人

James Spencer 在电力行业拥有 35 年的经验,在发达国家和不发达国家管理能源项目的开发和融资。他是 EverPower Wind Holdings 的创始人、总裁兼首席执行官,这是一家成立 16 年的全国性的公用事业规模的开发和运营风能公司。目前 Jim 是 Exus North America Management Partners 的管理合伙人。

## **Ulf Henning Richter**

#### Founder & CEO, CARBON10B X Limited (HK)

Prof. Dr. Ulf Henning Richter is a professor, author, and serial entrepreneur. His work centers around sustainability, climate and energy resilience, ESG and global justice. He is the founder and CEO of CARBON10B X, focusing on nature-based solutions, thereof to generate carbon credits and renewable energy certificates to support the science-based net-zero targets of governments and multinational companies in adherence with local and international regulations.

### **James Spencer**

#### Managing Partner, Exus North America Management Partners

James Spencer has thirty-five years of experience in the power industry managing the development and financing of energy projects in both developed and underdeveloped countries. He was the founder, president and CEO of EverPower Wind Holdings, a national utility scale development and operating wind company, for 16 years. Currently Jim is the Managing Partner of Exus North America Management Partners.

# 国际论坛

(2) 2023年9月13日(星期三)13:30-18:00

◎ 常州新城希尔顿酒店 – 新城大宴会厅

## 国际论坛

——全球清洁能源转型:技术、政策和激励措施

主持人:李若梅 中国能源研究会双碳产业合作分会副主任、中国电机工程学会原秘书长

闭 亮 斯坦福大学能源研究所比特瓦特计划执行主任

13:30-13:50 **致辞:** 

卞建华 IEEE 电力与能源协会主席

Mustafa Shehu 世界工程组织联合会当选主席

13:50-14:30 对话嘉宾:

周孝信 中国科学院院士、中国电力科学研究院名誉院长

凌 文 中国工程院院士、上海交通大学讲席教授

李俊峰 国家应对气候变化战略研究和国际合作中心首任主任

14:30-16:30 主旨报告:

Carsten Ahrens 世界工程组织联合会能源委员会太阳能工作组主席

Vladimir Terzija 纽卡斯尔大学教授

陶光远 中德可再生能源合作中心执行主任

Paulo Esmeraldo 国网巴西控股公司高级顾问

沈诗然 斯坦福大学助理教授

封善斋 海克斯康智能制造研究院副院长/能源行业分院院长

16:30-16:45 问答 & 总结

16:45-17:00 茶歇

# **International Forum**



(L) 13:30-18:00, September 13, 2023 (Wednesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

## **International Forum**

#### **Global Clean Energy Transition: Technologies, Policies and Incentives**

#### Moderator:

Ruomei Li, Deputy Director, Dual-Carbon Industry Cooperation Branch, China Energy Research Society Former Secretary General, CSEE **Liang Min**, Managing Director for the Bits and Watts Initiative, Precourt Institute for Energy

13:30-13:50 **Opening Remarks:** 

Jessica J. Bian, President, Power and Energy Society (PES), Institute of Electrical and Electronics Engineers (IEEE)

Mustafa Shehu, President Elect, World Federation of Engineering Organizations (WFEO)

13:50-14:30 Dialogue:

**Zhou Xiaoxin**, Academician, Chinese Academy of Sciences

Honorary President, China Electric Power Research Institute

**Ling Wen**, Academician of the Chinese Academy of Engineering

Chair Professor at Shanghai Jiao Tong University

**Li Junfeng**, First Director, National Centre for Climate Change Strategy and International Cooperation

14:30-16:30 **Keynote Speeches:** 

Carsten Ahrens, Chairman of Solar Energy Group of STC Energy of WFEO

Vladimir Terzija, Professor, Energy Systems & Networks, Newcastle University

Tao Guangyuan, Executive Director, Sino-German Renewable Energy Center

Paulo Esmeraldo, Consultor, State Grid Brazil Holding

Shiran Victoria Shen, Senior Research Scholar, Precourt Institute for Energy, Stanford University

Feng Shanzhai, Vice Dean of Hexagon Intelligent Research Institute / Dean of Hexagon Energy Industry Institute

**Q&A** and Summary 16:30-16:45

16:45-17:00 **Tea Break** 

## 国际论坛

#### 主持人



李若梅 中国能源研究会双碳产业合作分会副主任 中国电机工程学会原秘书长

中国电机工程学会原秘书长,清华大学四川能源互联网研究院特聘高级研究员;中国能源研究会双碳产业合作分会副主任。2005年开始在多个国际组织包括CIGRE、CIRED、WFEO和IEEE任职,目前是WFEO的执委。



#### 京 斯坦福大学能源研究所比特瓦特计划执行主任

领导着一个多学科的联盟计划,汇集了来自不同领域的专家,推动 21 世纪电网的数字化转型。担任新成立的 Net-Zero 联盟的执行主任,为全球企业与斯坦福大学在实现净零未来的研究和教育方面提供合作平台。

致辞嘉宾



卞建华 IEEE 电力与能源协会主席

IEEE 高级会员,美国联邦能源管制委员会高级顾问,长期从事电力行业可靠性指标和电网风险评估技术等方面的研究,具有 25 年的电力系统及自动化方面的商业与研发、系统集成及软件管理的丰富经验。



Mustafa Shehu 世界工程组织联合会当选主席

世界工程组织联合会 (WFEO) 的当选主席。非洲工程组织联合会 (FAEO) 以及尼日利亚工程师协会 (NSE) 前主席。电气工程师,在电力工程、项目管理、行政和领导方面拥有超过 35 年的经验。

## **International Forum**

Moderator

#### Ruomei Li

# Deputy Director, Dual-Carbon Industry Cooperation Branch, China Energy Research Society Former Secretary General, CSEE

Dr. Ruomei Li, former Secretary General, Chinese Society of Electrical Engineering (CSEE, 2009-2013); Research Fellow, Sichuan Energy Internet Research Institute, Tsinghua University; Deputy Chair, Carbon Neutrality Industry Cooperation Sub-Committee of CERS. Since 2005, she has served as China's representative in various international organizations including CIGRE, CIRED, WFEO. She is currently on the Executive Board of WFEO (2015~).

## **Liang Min**

#### Managing Director for the Bits and Watts Initiative, Precourt Institute for Energy

As the Managing Director of the Bits & Watts Initiative at Stanford University, Dr. Liang Min leads a multi-disciplinary affiliates program that brings together experts from various fields to drive the digital transformation of the electric grid in the 21st century. Dr. Min is also the Managing Director of the newly established Net-Zero Alliance, which provides a platform for global companies to collaborate with Stanford on research and education focused on achieving a net-zero future.

**Opening Remarks** 

### Jessica J. Bian

## President, Power and Energy Society (PES), Institute of Electrical and Electronics Engineers (IEEE)

IEEE Fellow, Senior Advisor at the United States Federal Energy Regulatory Commission (FERC). She has been engaged in research related to reliability metrics in the power industry and grid risk assessment technologies. With 25 years of experience, she has a wealth of expertise in business and research in power systems and their automation, system integration, and software management.

### Mustafa Shehu

#### President Elect, World Federation of Engineering Organizations (WFEO)

Mustafa Shehu is the President-Elect of the World Federation of Engineering Organizations (WFEO). He is a former President of the Federation of African Engineering Organizations, FAEO as well as the Nigerian Society of Engineers (NSE). He is an electrical engineer by training and has over 35 years of experience in electrical power engineering, project management, administration, and leadership.

## 国际论坛

#### 对话嘉宾



#### **周孝信** 中国科学院院士、中国电力科学研究院名誉院长

电力系统专家,中国科学院院士,美国国家工程院外籍院士,IEEE 会士,教授级高级工程师、博士生导师。中国电力科学研究院名誉院长。长期从事电力系统分析和控制数学模型和计算方法的研究。



## 凌 文 中国工程院院士、上海交通大学讲席教授

上海交通大学讲席教授,中国工程院院士,山东省科协主席。曾任中国神华能源股份有限公司总裁、董事长;神华集团党组副书记、总经理;国家能源集团党组副书记、总经理;山东省副省长。



#### 李俊峰 国家应对气候变化战略研究和国际合作中心首任主任

长期从事能源经济和能源环境理论的研究,先后组织并主持了我国可再生能源 法、国家中长期能源规划的起草工作,参与了国家中长期科技发展纲要、能源 法草案、国家应对气候变化方案等重要文件的研究和起草工作。

#### 主旨报告



### Carsten Ahrens 世界工程组织联合会能源委员会太阳能工作组主席

德国雅德大学教授,研究领域包括:建筑环境的可持续性和伦理,可再生能源(风能和太阳能),绿氢(生产、运输、储存和应用)。世界工程组织联合会(WFEO)能源委员会太阳能工作组主席,《太阳能能源研究》作者。



### Vladimir Terzija 纽卡斯尔大学教授

英国纽卡斯尔大学教授、山东大学杰出教授、德国慕尼黑工业大学客座教授。 研究兴趣包括智能电网应用、WAMPAC、电力系统保护、瞬态过程、数据分析 以及数字信号处理在电力和能源系统中的应用。

### **International Forum**

Dialoque

#### **Zhou Xiaoxin**

#### Academician, Chinese Academy of Sciences Honorary President, China Electric Power Research Institute

Power system expert, Academician of the Chinese Academy of Sciences, Foreign academician of the U.S. National Academy of Engineering, IEEE Fellow, Professor-level senior engineer, and doctoral supervisor. Honorary President of the China Electric Power Research Institute. Engaged in long-term research on mathematical models and computational methods for power system analysis and control.

### **Ling Wen**

# Academician of the Chinese Academy of Engineering Chair Professor at Shanghai Jiao Tong University

Ling Wen, Chair Professor at Shanghai Jiao Tong University, Academician of the Chinese Academy of Engineering, and Chairman of the Shandong Provincial Association for Science and Technology. He has previously held positions as the President and Chairman of China Shenhua Energy Co., Ltd., Deputy Secretary of the Party Committee and General Manager of Shenhua Group, Deputy Secretary of the Party Committee and General Manager of the State Energy Group, and Vice Governor of Shandong Province.

## Li Junfeng

#### First Director, National Centre for Climate Change Strategy and International Cooperation

Mr. Li Junfeng has long been engaged in energy economics and the theory of energy and environment research, successively organized and presided over the drafting work on China's Renewable Energy Law and National Medium and Long-term Energy Plan, participated in research and drafting of The National Program for Medium and Long-term Scientific and Technological Development, National Strategic Emerging Industry Development Plan, Draft Energy Law, National Climate Change Plan and other important documents.

**Keynote Speeches** 

### **Carsten Ahrens**

#### Chairman of Solar Energy Group of STC Energy of WFEO

Professor at Jadehochschule in Oldenburg, Germany. Research topic: Sustainability and Ethics in the Built Environment, Renewable Energies (wind and solar), Green Hydrogen (production, transport, storage and use). Chairman of Solar Energy Group of STC Energy of WFEO, Author of "Study on Solar Energy" of WFEO.

### **Vladimir Terzija**

#### Professor, Energy Systems & Networks, Newcastle University

Professor of Energy Systems & Networks at the Newcastle University, UK. He is also a Distinguished Professor at Shandong University, China, as well as a Gest Professor at the Technical University of Munich, Germany. His research interests include smart grid applications; WAMPAC; power system protection; transient processes; data analytics and digital signal processing applications in electrical power and energy systems.

## 国际论坛



#### **陶光远** 中德可再生能源合作中心执行主任

毕业于陕西机械学院自动控制专业,1983年获得清华大学系统工程专业硕士学位。2011年10月起,在德国能源署(DENA)与中国可再生能源学会合作成立的中德可再生能源合作中心担任执行主任职务。



## Paulo Esmeraldo 国网巴西控股公司高级顾问

毕业于里约热内卢联邦大学,电力传输系统方面专家。IEEE 会士,曾获得 2000 年 CIGRE 技术委员会奖和 CIGRE 荣誉会员称号。现任国网巴西控股公司高级顾问。



#### 沈诗然 斯坦福大学助理教授

斯坦福大学可持续发展学院能源研究所高级研究学者,斯坦福大学土木与环境 工程系访问助理教授。



#### 封善斋 海克斯康智能制造研究院副院长/能源行业分院院长

具有 18 年制造行业计量解决方案的设计开发、项目管理经验。在能源行业,负责为各个细分领域客户提供包括设计及仿真(CAD/CAE),CAM及加工仿真,车间在线柔性自动化数字化检测,风电、光伏场的智慧建设及运维等数字化方案。

## **International Forum**

## **Tao Guangyuan**

#### **Executive Director, Sino-German Renewable Energy Center**

He graduated in 1979 with a major in automatic control from Shaanxi University of Technology and obtained a master's degree in systems engineering from Tsinghua University in 1983. Since October 2011, he has served as the Executive Director of the Sino-German Renewable Energy Cooperation Center, a collaboration between the German Energy Agency (DENA) and the China Renewable Energy Society.

#### **Paulo Esmeraldo**

#### Consultor, State Grid Brazil Holding

Paulo Cesar Vaz Esmeraldo is electrical engineer from Federal University of Rio de Janeiro, expert on Power Transmission Systems. He is IEEE Fellow, recipient of the 2000 CIGRE Technical Committee Award and CIGRE Honorary Member. Presently, he is Senior Consult of State Grid Brazil Holding.

#### **Shiran Victoria Shen**

#### Senior Research Scholar, Precourt Institute for Energy, Stanford University

Visiting Assistant Professor, Department of Civil and Environmental Engineering. Stanford Doerr School of Sustainability.

### Feng Shanzhai

#### Vice Dean of Hexagon Intelligent Research Institute /Dean of Hexagon Energy Industry Institute

He has 18 years of experience in the R&D and project management of measurement solutions in various manufacturing industries. In the energy industry, he is responsible for providing quality centered full life cycle solutions for customers in various sectors, including design and CAD/CAE simulation, CAM and Manufacture simulation, Intelligent measurement solutions, intelligent Building, operation and maintenance solutions of wind power and photovoltaic farm, and other digital solutions.

# 国际论坛

(2) 2023年9月13日(星期三)13:30-18:00

常州新城希尔顿酒店 - 新城大宴会厅

## 机构交流

——从国际视角看中国能源转型

主持人: 黄少中 中国能源研究会双碳产业合作分会主任、国家能源局西北监管局原局长

17:00-18:00 讨论嘉宾:

于 涵 能源基金会煤炭转型综合工作组主任

袁 敏 世界资源研究所中国气候与能源部能源转型项目总监

张晓楠 EDF 北京代表处项目主管

刘明明 自然资源保护协会清洁电力项目副主任

李 威 落基山研究所低碳工业总监

18:30-20:30 晚餐

# **International Forum**

(L) 13:30-18:00, September 13, 2023 (Wednesday)



Futureland Grand Ballroom, 2nd Floor, Hilton Changzhou

## **Organization Dialogue**

#### A Global Perspective on China's Energy Transition

Moderator: Huang Shaozhong, Director, Dual-Carbon Industry Cooperation Branch of China Energy Research Society

17:00-18:00 **Panelists:** 

Yu Han, Director of Coal Transition at the Energy Foundation

Yuan Min, Director of the Energy Transition Project of the World Resources Institute

Zhang Xiaonan, Manager, EDF Beijing Representative Office

Liu Mingming, Deputy director, Clean power project, NRDC

Li Wei, Heavy Industry Decarbonization Manager of Rocky Mountain Institute

18:30-20:30 **Dinner** 

## 机构交流

#### 主持人



**黄少中** 中国能源研究会双碳产业合作分会主任 国家能源局西北监管局原局长

中国能源研究会研究员、中国能源研究会双碳产业合作分会主任、高级经济师、高级会计师、世界银行高级专家、国家能源局西北监管局原局长。

#### 讨论嘉宾



于 派 能源基金会煤炭转型综合工作组主任

2022 年 5 月加入能源基金会,担任煤炭转型主任,主要负责煤炭转型的战略研究,涉及煤炭产业链经济转型与就业,替代能源研究等议题。



### 袁 敏 世界资源研究所中国气候与能源部能源转型项目总监

现任中国气候与能源部能源转型项目总监。致力于城市层面的能源活动和相关的能耗与碳排放分析,以及城市低碳发展规划蓝图研究。



张晓楠 EDF 北京代表处项目主管

EDF 能源领域甲烷排放项目主管。长期致力于可再生能源技术及低碳减排等领域相关政策及发展战略规划的研究,并具有多年碳资产管理、CCUS 等相关领域的工作经验。

## **Organization Dialogue**

Moderator

## **Huang Shaozhong**

#### Director, Dual-Carbon Industry Cooperation Branch of China Energy Research Society

Researcher at China Energy Research Society, Director of the Carbon Neutrality Industry Cooperation Sub-Committee of China Energy Research Society, Senior Economist, Senior Accountant, Senior Expert at the World Bank, Former Director of Northwest Supervision Bureau of the National Energy Administration.

**Panelists** 

#### Yu Han

#### **Director of Coal Transition at the Energy Foundation**

Ms. Yu Han joined the Energy Foundation in May 2022 as the Director of Coal Transition, primarily responsible for strategic research on coal transition, including topics related to economic transformation and employment in the coal industry supply chain, as well as research on alternative energy sources.

#### **Yuan Min**

#### Director of the Energy Transition Project of the World Resources Institute

Yuan Min currently serves as the Director of the Energy Transition Project at the China Climate and Energy Department. She is dedicated to energy activities at the urban level, along with related energy consumption and carbon emissions analysis, as well as research on blueprints for low-carbon urban development planning.

### **Zhang Xiaonan**

#### Manager, EDF Beijing Representative Office

Dr. Zhang is the manager for methane emissions in the energy sector of the EDF. She has long been committed to policies and development strategic planning in the fields of renewable energy technology and low-carbon emission reduction, and has years of work experience in carbon asset management, CCUS, and other related fields.





### 刘明明 自然资源保护协会清洁电力项目副主任

主要负责推动中国电力部门的低碳转型工作,包括可再生能源的高比例并网和需求侧资源的规模化发展,同时负责"电力圆桌"的协调和组织工作。



#### 李 威 落基山研究所低碳工业总监

落基山研究所低碳工业总监,主要从事重工业行业的低碳转型研究。在落基山研究所期间参与了中国水泥行业碳中和路线图、央国企双碳行动评价、企业碳管理行业标准、绿钢与绿色建材供应链脱碳、钢铁产品碳核算等课题的研究。

## **Liu Mingming**

#### Deputy director, Clean power project, NRDC

Dr. Liu Mingming is primarily responsible for promoting the low-carbon transformation of China's electricity sector, including the high-level integration of renewable energy and the large-scale development of demand-side resources. She is also responsible for coordinating and organizing the work of the Power Roundtable.

#### Li Wei

#### Heavy Industry Decarbonization Manager of Rocky Mountain Institute

Wei Li is the Manager of Heavy Industry Decarbonization at Rocky Mountain Institute (RMI), focusing on the low-carbon transition of heavy industry sectors. He has been involved in research on a carbon-neutral roadmap for China's cement industry, evaluation of dual-carbon initiatives by centralized state-owned enterprises, industry standards for corporate carbon management, decarbonization of the green steel and green building materials supply chain, and carbon accounting for steel products.

# 青年论坛

# 继承传统,拥抱未来

(2) 2023年9月13日(星期三)14:00-15:30

② 常州新城希尔顿酒店二层帝景厅

# 青年论坛(平行论坛)

14:00-14:10 致辞及活动介绍

14:10-14:30 讲述老一辈能源人的故事

14:30-14:50 继承传统, 拥抱未来

学生代表发言

14:50-15:00 走进武进,奉献青春

武进区人才政策宣讲

15:00-15:30 交流互动

# **Youth Forum**

# **Carrying Forward Traditions and Embracing the Future**



14:00-15:30, September 13, 2023 (Wednesday)



Empire Ballroom, 2nd Floor, Hilton Changzhou

## **Youth Forum (Parallel Forum)**

14:00-14:10	Opening Remarks and Introductions
14:10-14:30	Stories about the Older Oeneration of Energy Workers
14:30-14:50	<b>Carrying Forward Traditions, and Embracing the Future</b>
	Speech by Student Representative
14:50-15:00	Work in Wujin
	Promotion of Wujin District Human Resources and Talents Policies
15:00-15:30	Q&A

# 专题论坛

## 碳中和产业合作论坛

🖰 9月14日(星期四)上午09:00-11:30

② 常州新城希尔顿酒店二层 帝景厅

## 专题论坛一

——融合共生,构筑可持续绿色未来

主持人: 张葵叶 中国能源研究会双碳产业合作分会副秘书长、中国能源网副总经理

09:00-09:10 开场致辞 黄少中 中国能源研究会双碳产业合作分会主任、国家能源局西北监管局原局长 孙益锋 武进区委常委、副区长,中以常州创新园党工委书记、管委会主任 09:10-09:30 双碳背景下能源与产业高质量发展 王培红 东南大学教授、长三角碳中和战略发展研究院副院长 09:30-09:50 科技创新驱动的未来产业发展 王晓明 中国科学院科技战略咨询研究院科技发展战略研究所副所长 09:50-10:10 基于生态视角的碳中和产业商业模式创新设计 吴鸿亮 南方电网能源发展研究院投资与财务研究所副所长 10:10-10:30 县域"源网荷储一体化"合作模式探讨 陈 臻 阳光时代律师事务所创始人、管委会主任 10:30-10:50 建筑工程施工阶段能耗和碳排放计量分析 孙海营 瑞杰历信行(北京)数据科技有限公司副董事 10:50-11:10 通往净零的路径 创新势在必行 **冉 泽** EDF 北京代表处技术创新主任 11:10-11:30 国际全产业链实现碳中和的新趋势和贸易壁垒 王 瑞 IVL 瑞典环境科学研究院中国代表处高级低碳专家 11:30-11:50 集群化发展助力低碳转型之: 工业场景中大规模绿氡应用模式研究 薛雨军 落基山研究所 (RMI) 高级咨询师



# **Special Forum**

## **Forum on Carbon Neutrality Industry Cooperation**



(C) 09:00-11:30 a.m., September 14, 2023 (Thursday)



Empire Ballroom, 2nd Floor, Hilton Changzhou

## Panel I

### **Integration and Cooperation for a Sustainable and Green Future**

Moderator: Zhang Kuiye, Deputy Secretary-General of Dual-carbon Industry Cooperation Branch, CERS, Vice President of China Energy Net

	Vice President of China Energy Net
09:00-09:10	Opening Remarks  Huang Shaozhong, Director, Dual-Carbon Industry Cooperation Branch of China Energy Research Society
09:10-09:30	High Quality Development of Energy and Industry in the Context of Carbon Neutrality Wang Peihong, Vice President, Yangtze River Delta Carbon Neutrality Strategic Development Research Institute at Southeast University
09:30-09:50	The Development of Future Industries Driven by Technological Innovation  Wang Xiaoming, Institutes of Science and Development, Chinese Academy of Sciences (CASISD), Research Department of Industry Technology Innovation, Director, Research Fellow.
09:50-10:10	Innovative Design of Carbon Neutrality Industry Business Models from an Ecosystem Perspective Wu Hongliang, Deputy Director of Investment and Finance Research Institute, Energy Development Research Institute, CSG.
10:10-10:30	Discussion on the "Source-Grid-Load-Storage Integration" Cooperation Model at the County Level Chen Zhen, Founder the Director of the Management Committee of Sunshine Law Firm
10:30-10:50	Quantitative Analysis of Energy Consumption and Carbon Emissions in the Construction Phase of Construction Work  Zorrow, Deputy Director, RECHE-WIDNELL BEIJING Data.T Co., Ltd
10:50-11:10	Innovation is Imperative on the Path to Net Zero Emissions Ran Ze, Director of Technology Innovation, EDF Beijing Office
11:10-11:30	New Trends and Trade Barriers to Realize Carbon Neutrality in the International Whole Industry Value Chain Wang Rui, Director, IVL Swedish Environmental Research Institute
11:30-11:50	Cluster for decarbonization: Research on scaling up green hydrogen applications for industrial use Yujun Xue, Senior Associate, Rocky Mountain Institute(RMI)



## 专题论坛一

#### 主持人



**张葵叶** 中国能源研究会双碳产业合作分会副秘书长中国能源网副总经理

一直从事能源行业信息及研究咨询服务,目前主要从事双碳产业合作、分布式 能源、可再生能源及多能融合方面的政策研究、投融资、市场调查及项目开发 工作。

致辞嘉宾



**黄少中** 中国能源研究会双碳产业合作分会主任 国家能源局西北监管局原局长

中国能源研究会研究员、中国能源研究会双碳产业合作分会主任、高级经济师、高级会计师、世界银行高级专家、国家能源局西北监管局原局长。



**孙益锋** 武进区委常委、副区长中以常州创新园党工委书记、管委会主任

#### 演讲嘉宾



## **王培红** 东南大学教授、长三角碳中和战略发展研究院副院长

东南大学能源与环境学院教授(博导)、江苏省能源研究会常务副理事长,江苏省科协首席科技传播专家。长期从事复杂能源系统建模、优化与控制以及区域能源经济环境协调可持续发展相关领域的课题研究。



#### 王晓明 中国科学院科技战略咨询研究院科技发展战略研究所副所长

中国科学院科技战略咨询研究院研究员,先后任职重任部研究员和科技发展战略研究所副所长,现任产业科技创新研究部部长,主要研究产业科技融合创新,重点研究战略性新兴产业和未来产业、数字经济和绿色低碳产业。

## Panel I

Moderator

### **Zhang Kuiye**

# Deputy Secretary-General of Dual-carbon Industry Cooperation Branch, CERS, Vice President of China Energy Net

She has been engaged in information and research consulting services in the energy industry and currently focuses on policy research, investment and financing, market surveys, and project development in the fields of dual carbon industry cooperation, distributed energy, renewable energy, and multi-energy integration.

**Opening Remarks** 

## **Huang Shaozhong**

#### Director, Dual-Carbon Industry Cooperation Branch of China Energy Research Society

Researcher at China Energy Research Society, Director of the Carbon Neutrality Industry Cooperation Sub-Committee of China Energy Research Society, Senior Economist, Senior Accountant, Senior Expert at the World Bank, Former Director of Northwest Supervision Bureau of the National Energy Administration.

**Keynote Speeches** 

## **Wang Peihong**

## Vice President, Yangtze River Delta Carbon Neutrality Strategic Development Research Institute at Southeast University

Currently serving as a professor (doctoral supervisor) at the School of Energy and Environment at Southeast University, Vice President of the Yangtze River Delta Carbon Neutrality Strategic Development Research Institute at Southeast University, Executive Vice Chairman of the Jiangsu Energy Research Association, and Chief Technology Communication Expert of the Jiangsu Association for Science and Technology. Engaged in long-term research on complex energy system modeling, optimization and control, as well as coordinated and sustainable development of regional energy economy and environment.

## **Wang Xiaoming**

# Institutes of Science and Development, Chinese Academy of Sciences (CASISD), Research Department of Industry Technology Innovation, Director, Research Fellow.

Institutes of Science and Development, Chinese Academy of Sciences, Research Fellow. He successively served as a research fellow of the Department of Responsibility and the deputy director of the Institute of Science and Technology Development Strategy. He is currently the director of the Research Department of Industrial Technology Innovation. He mainly studies industrial technology integration and innovation, focusing on strategic emerging industries and future industries, digital economy, and low-carbon industries.





吴鸿亮 南方电网能源发展研究院投资与财务研究所副所长

中国南方电网有限责任公司高级技术专家,南方电网能源发展研究院有限责任公司投资与财务研究所副所长,IEEE PES 能源电力技术经济分委会常务理事。南方电网公司劳动模范,获得南方电网公司"十大杰出青年"提名奖。长期从事能源经济、能源电力投资研究工作。



#### 陈 琴 阳光时代律师事务所创始人、管委会主任

擅长为国家大型重点能源项目及环保工程提供全过程法律服务,一直走在全国能源、环境与基础设施领域法律服务的前列。近年来参与了大量能源与环境领域的立法课题工作,支持传统能源企业制定低碳转型发展战略。



**孙海营** 瑞杰历信行(北京)数据科技有限公司副董事

英国皇家特许测量师学会会员,工程师,国家一级注册造价工程师。孙海营先生及瑞杰历信行研发团队,一直致力于建筑成本数据模型和碳计量数据模型的研究。



冉 泽 EDF 北京代表处技术创新主任

冉泽,EDF 北京代表处技术创新主任。曾任中国能源网 CIO、曾负责及参与多个政府部门、研究机构或能源企业委托的相关课题。



**王** 端 IVL 瑞典环境科学研究院中国代表处高级低碳专家

具有十五年生态环保、低碳和可持续发展行业经验,擅长的领域包括碳交易、 国际 EPD 认证咨询和审核、LCA 全生命周期评价、企业碳排放计算和管理、 产业链碳排放管理、产品碳足迹核算等。



薛雨军 落基山研究所 (RMI) 高级咨询师

主要研究领域是钢铁、化工等重工业行业的能源转型,关注产业集群、需求侧和转型金融对重工业脱碳的推动作用,在绿氢和 CCUS 等低碳技术有较多研究经验。化工转型路线图、清洁氢冶金等报告的主要作者之一。

## **Wu Hongliang**

## Deputy Director of Investment and Finance Research Institute, Energy Development Research Institute, CSG.

Senior Technical Expert at South China Grid, Deputy Director of the Investment and Finance Research Institute at the South China Grid Energy Academy, and Executive Director of the IEEE PES Energy Power Technology and Economics Subcommittee. He is recognized as a model worker at the South China Grid Company and has received the nomination award for "Top Ten Outstanding Young Employees" from the South China Grid Company. He has long been engaged in research on energy economics and energy power investment.

#### **Chen Zhen**

#### Founder the Director of the Management Committee of Sunshine Law Firm

She excels in providing full-cycle legal services for large-scale national key energy projects and environmental protection projects, and has been leading Sunshine Law Firm to the forefront of legal services in the national energy, environment and infrastructure fields. In recent years, she has participated in a large number of legislative research in the energy and environmental fields, and supported traditional energy companies in formulating low-carbon transformation and development strategies.

#### **Zorrow**

#### Deputy Director, RECHE·WIDNELL (BEIJING) Data.T Co., Ltd

A member of the Royal Institution of Chartered Surveyors (RICS) in the United Kingdom, an engineer, and a nationally registered first-level cost engineer. Mr. Sun Haiying, along with the Rejilexin Research and Development Team, has been dedicated to the research of building cost data models and carbon measurement data models.

#### Ran Ze

#### Director, Technology Innovation, EDF Beijing Representative Office

Ran Ze, Director, Technology Innovation, EDF Beijing Representative Office. Formerly served as the CIO of China5e, responsible for and participated in relevant research projects commissioned by multiple government departments, research institutions, or energy enterprises.

## **Wang Rui**

#### Director, IVL Swedish Environmental Research Institute

With fifteen years of experience in the fields of ecological environmental protection, low carbon, and sustainable development, their expertise includes carbon trading, international EPD certification consulting and auditing, LCA (Life Cycle Assessment) comprehensive evaluation, corporate carbon emissions calculation and management, supply chain carbon emissions management, product carbon footprint accounting, and more.

### **Yujun Xue**

#### Senior Associate, Rocky Mountain Institute(RMI)

His main research area is the energy transition of steel, chemicals, and other heavy industries. He focuses on roles of industrial clusters, demand-side, and transition finance in driving heavy industry decarbonization, with research experience in green hydrogen and CCUS. He is one of the main authors of the chemicals transformation roadmap and clean hydrogen-based steelmaking research reports.

# 专题论坛

## 清洁能源技术创新论坛

[○ 9月14日(星期四)上午09:00-12:10

② 常州新城希尔顿酒店二层 新城大宴会厅 BC

## 专题论坛二

——创新, 引领未来能源

主持人: 杨富强 北京大学能源研究院特邀研究员

09:00-09:10 开场致辞

段洁仪 中国能源研究会分布式能源专业委员会主任

朱慧峰 武进区人民政府副区长

09:10-09:30 光伏电——有巨大发展潜力的未来能源

许瑞林 江苏省光伏产业协会顾问、原秘书长

09:30-09:50 光储充放技术在城市能源供应和存储方面的创新应用

尚德华 万帮数字能源股份有限公司产品线总经理

09:50-10:10 通过数字智能技术,助力清洁能源行业加速发展

万 鹏 海克斯康能源行业分院方案技术总监

10:10-10:30 新形态下的"土地 + 光伏"

翁晓军 通威新能源工程设计四川有限公司市场开发总监

谢滨欢 纬景储能科技有限公司产学研部门负责人

10:50-11:10 双良绿色低碳清洁能源解决方案及应用

张振新 双良节能系统股份有限公司双良低碳设计院副院长

11:10-11:30 发挥"双源"技术优势,打造高品质风电齿轮箱

张保松 中车戚墅堰所瑞泰装备公司副总经理

11:30-11:50 地面光储系统创新方向探讨

杨森森 阳光电源光储集团解决方案高级经理



CERS DE 中国能源研究会 分布式能源专业委员会

# **Special Forum**

## **Clean Energy Innovation Forum**



09:00-12:10 a.m., September 14, 2023 (Thursday)



Futureland Grand Ballroom BC, 2nd Floor, Hilton Changzhou

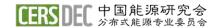
## **Panel II**

## **Innovation-Heading to Future Energy**

Moderator: Yang Fuqiang, Distinguished Research Fellow, Institute of Energy, Peking University

09:00-09:10	Opening Remarks  Duan Jieyi, Director of the Distributed Energy Professional Committee of the China Energy Research Society
09:10-09:30	Photovoltaic Power – Future Energy with Tremendous Development Potential  Xu Ruilin, Consultant and former Secretary-General, Jiangsu Photovoltaic Industry Association
09:30-09:50	Innovative Applications of Photovoltaic Storage and Charging Technologies for Urban Energy Supply and Storage
	Shang Dehua, General Manager of the product line at Wanbang Digital Energy Co. Ltd.
09:50-10:10	Accelerate the Development of the Clean Energy Industry through Digital Intelligence Technology Wan Peng, Solution Director of Hexagon Energy Industry Institute
10:10-10:30	The "Land + Photovoltaics" in the Current Situation
	Weng Xiaojun, Market Development Director of Tongwei New Energy Engineering Design Sichuan Co., Ltd.
10:30-10:50	Zinc-iron Flow Battery, a LDES Battery with Low-cost and Safety  Xie Binhuan, Expert in Industry-academia-research, WeView Energy Storage Co., Ltd.
10:50-11:10	Shuangliang green low-carbon clean energy solutions and applications  Zhang Zhenxin, Vice president of Shuangliang Low carbon design Institute, Shuangliang Eco-Energy Systems Co., LTD.
11:10-11:30	Leveraging the 'dual-source' technological advantage to create high-quality wind turbine gearboxes
	<b>Zhang Baosong</b> , Deputy General Manager of CRRC Qishuyan Institute, Ruitai Equipment Company
11:30-11:50	Discussion on Innovation Direction of Utility-PV & Storage System  Roby, Senior Manager of solutions in East China Region of PV & Storage BG, Sungrow





## 专题论坛二

#### 丰特人



杨富强 北京大学能源研究院特邀研究员

四十多年来一直致力于中国的可持续能源战略和政策研究,在推进建筑、工业和交通部门节能、低碳生态城市、电力和可再生能源、应对气候变化等方面做了很多研究工作。

开场致辞



段洁仪 中国能源研究会分布式能源专业委员会主任

教授级高级工程师,注册咨询工程师,注册公用设备工程师,新世纪百千万人才工程国家级人选,国务院政府特殊贡献津贴专家。长期从事供热、供燃气和能源综合利用领域的研究、规划、投资、设计、建设、运营等工作。



朱慧峰 武进区人民政府副区长

演讲嘉宾



**许瑞林** 江苏省光伏产业协会顾问、原秘书长

二级研究员,享受国务院政府特殊津贴。长期从事能源经济、能源规划、能源政策、能源软科学研究和新兴产业推进工作。曾任江苏省可再生能源发展项目办公室主任、江苏省光伏产业协会秘书长。



**尚德华** 万帮数字能源股份有限公司产品线总经理

就读于清华大学自动化系电子信息专业。现任中国动力工程学会理事、上海市 青年科技人才协会理事,高级工程师。长期从事新型储能领域安全关键技术研 究和微电网产品集成优化研发管理工作。

## **Panel II**

Moderator

### **Yang Fugiang**

#### Distinguished Research Fellow, Institute of Energy, Peking University

Dr. Yang Fuqiang has been dedicated to research on sustainable energy strategies and policies in China for over forty years. He has conducted extensive research in areas such as energy conservation in the construction, industrial, and transportation sectors, low-carbon eco-cities, electricity and renewable energy, and climate change mitigation.

**Opening Remarks** 

## **Duan Jieyi**

## Director of the Distributed Energy Professional Committee of the China Energy Research Society

Professor-level Senior Engineer, Registered Consulting Engineer, Registered Public Equipment Engineer, National-level candidate for the New Century Talents Project, and Special Government Allowance Expert of the State Council. She has been engaged in research, planning, investment, design, construction, operation, and other work in the field of heating, gas supply, and comprehensive energy utilization for a long time.

Keynote Speeches

#### **Xu Ruilin**

#### Consultant and former Secretary-General, Jiangsu Photovoltaic Industry Association

Xu Ruilin holds the title of Senior Research Fellow and enjoys a special government allowance from the State Council of China. He has been actively engaged in research related to energy economics, energy planning, energy policy, energy soft science, and the promotion of emerging industries. He previously served as the Director of the Office for Renewable Energy Development Projects in Jiangsu Province and as the Secretary-General of the Jiangsu Photovoltaic Industry Association.

## **Shang Dehua**

#### General Manager of the product line at Wanbang Digital Energy Co. Ltd.

He obtained his Ph.D. in Electronic and Information Engineering from the Department of Automation at Tsinghua University. Currently, he serves as a director of the Chinese Society of Power Engineering and a director of the Shanghai Association for Science and Technology Youth Talents. He is also a senior engineer. He has long been engaged in research on key safety technologies in the field of new energy storage and the integration and optimization of microgrid products.



万 鹏 海克斯康能源行业分院方案技术总监

具有多年智能制造方案的设计开发、项目管理经验,负责海克斯康能源行业和 非标自动化行业的解决方案。在能源行业,负责为光伏、风电、氢能、锂电等 领域提供包括各类检测专机,车间在线柔性自动化、数字化检测方案。



#### 翁晓军 通威新能源工程设计四川有限公司市场开发总监

现任通威新能源工程设计四川有限公司市场开发总监,专注光伏终端技术领域研发和电站设计,是新能源发展和创新的重要参与者,为客户提供优质的新能源系统集成解决方案。



### **谢滨欢** 纬景储能科技有限公司产学研部门负责人

毕业于中国科学院,获材料学博士学位。多年高校及科研院所工作经历,随后 投身产业界,拥有丰富的产学研、政策研究和战略合作经验,熟悉新能源及储 能政策,主导完成多项产学研用联合项目。



## 张振新 双良节能系统股份有限公司双良低碳设计院副院长

中国制冷学会常务理事,有近三十年制冷热泵行业从业经验,熟悉各类吸收式/压缩式制冷热泵设备技术和应用,参与近百个大型清洁低碳供热项目的设计建设,为数百个工业余热利用节能项目及公建高效机房项目提供解决方案。

## **Wan Peng**

#### Solution Director of Hexagon Energy Industry Institute

With years of experience in design, development, and project management of intelligent manufacturing solutions, responsible for solutions for the Hexconn energy industry and non-standard automation industry. In the energy industry, responsible for providing customers in various segmented fields such as photovoltaic, wind power, hydrogen energy, lithium battery, etc. with quality centered full lifecycle solutions, including various testing machines, workshop online flexible automation, and digital testing solutions.

### Weng Xiaojun

#### Market Development Director of Tongwei New Energy Engineering Design Sichuan Co., Ltd.

Focusing on the research and development of photovoltaic terminal technology and power station design. He is an important participant in new energy development and innovation, providing customers with high-quality new energy system integration solutions, covering power investment.

#### **Xie Binhuan**

#### Expert in Industry-academia-research, WeView Energy Storage Co., Ltd.

Graduated from the Chinese Academy of Sciences with a Ph.D. in Materials Science. With many years of experience working in universities and research institutes, she later entered the industrial sector, accumulating rich experience in industry-academia research, policy research, and strategic cooperation. She is familiar with new energy and energy storage policies and have led the completion of numerous industry-academia-research collaborative projects.

## **Zhang Zhenxin**

## Vice president of Shuangliang Low carbon design Institute, Shuangliang Eco-Energy Systems Co., LTD.

Standing director of the Chinese Society of Refrigeration, with nearly 30 years of experience in the refrigeration and heat pump industry, familiar with various types of absorption Compression/compression refrigeration heat pump equipment technology and application, participated in the design of nearly a hundred large-scale clean and low-carbon heating projects Design and construction, providing solutions for hundreds of industrial waste heat utilization energy-saving projects and public building high-efficiency computer room projects.



张保松 中车戚墅堰所瑞泰装备公司副总经理

中华全国铁路总工会火车头奖章获得者,16年齿轮传动设计开发经验,带领团队完成1.5兆瓦-20兆瓦各型风电齿轮箱产品的研发和技术储备,主持或参与多项省级和中国中车项目,取得多项科技成果奖、专利和核心论文等数十项。



## 杨森森 阳光电源光储集团解决方案高级经理

阳光电源光储集团华东区解决方案高级经理,主要从事光储系统解决方案、光储技术融合研究及市场推广工作。参与国内外诸多标杆型光伏及储能项目工作,有着丰富的光储多场景解决方案经验。

## **Zhang Baosong**

#### Deputy General Manager of CRRC Qishuyan Institute, Ruitai Equipment Company

He is the recipient of the Locomotive Award from the All-China Federation of Trade Unions and has 16 years of experience in gear transmission design and development. He has led a team in the research and development of gearboxes for wind turbines ranging from 1.5MW to 20MW, and has been involved in multiple provincial and CRRC projects. He has achieved numerous technological awards, patents, and core research papers, among others.

## Roby

#### Senior Manager of solutions in East China Region of PV & Storage BG, Sungrow

Mainly engaged in PV & storage system solutions, technology integration research and marketing. Participated in many benchmarking PV and energy storage projects at home and abroad, and has rich experience in multi-scenario solutions.

# 专题论坛

## 氢能技术与应用发展论坛

9月14日(星期四)上午09:00-12:00

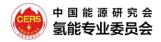
② 常州新城希尔顿酒店二层 新城大宴会厅 A

## 专题论坛三

——氢能创新驱动,引领绿色未来

主持人:徐文辉 中国能源研究会氢能专业委员会秘书长、国电投(广东)综合智慧能源创新研究院总经理

09:00-09:10 开场致辞 徐 俊 武讲区委常委、两太湖科技产业园党工委书记 09:10-09:20 常州氡湾推介 牛 明 常州西太湖科技产业园管委会招商局局长 09:20-09:40 光解水制氢才是绿氢的发展之路 段东平 中国科学院过程工程研究所研究员 09:40-10:00 中国氢能燃料电池标准现状 王 刚 中国质量认证中心质量技术部部长 10:00-10:20 吉利高效零碳氢内燃机开发 **韦 虹** 吉利汽车动力研究院新技术开发部部长 氢燃料核心零部件的机遇与挑战 10:20-10:40 王 英 中汽创智科技有限公司新能动力事业部首席技术官 10:40-11:00 氢能重塑全球能源格局 詹伟祥 德勤中国氢能卓越中心主管合伙人 11:00-11:20 卡特彼勒纯氢内燃机发电技术介绍 干永堂 卡特彼勒电力事业部资深行业经理 11:20-11:40 氢能重卡的技术路线和商业化探索 姜 斌 北京氢璞创能科技有限公司市场部副总经理 对天然气企业发展氢能的思考 11:40-12:00 宋鹏飞 中海石油气电集团有限责任公司技术专家、氢能资深工程师



# **Special Forum**

## **Hydrogen Technology Application and Development Forum**



(T) 09:00-12:00 a.m., September 14, 2023 (Thursday)



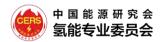
Futureland Grand Ballroom A, 2nd Floor, Hilton Changzhou

## **Panel III**

### **Hydrogen Energy Innovation Driving a Greener Future**

Moderator: Xu Wenhui, Secretary-General, Hydrogen Energy Professional Committee of China Energy Research Society

09:00-09:10	Opening Remarks
09:10-09:20	Introduction to Changzhou Hydrogen Bay
09:20-09:40	Photolysis of Water to Produce Hydrogen ——Development Path of Green Hydrogen  Duan Dongping, Researcher, Institute of Process Engineering, Chinese Academy of Sciences
09:40-10:00	Current situation of hydrogen energy standardization in China  Wang Gang, Deputy secretary, National Technical Committee 342 on Fuel Cell and Flow Battery of Standardization Administration of China
10:00-10:20	Geely Developed Hydrogen Internal Combustion Engines with High-efficiency and Zero-carbon Emissions Wei Hong, Director of New Technology Development and Hydrogen Project, Geely Automotive Power Research Institute
10:20-10:40	Opportunities and challenges for hydrogen fuel core components  Wang Ying, CTO of New Energy Power Division of China Automotive Innovation Corporation
10:40-11:00	Hydrogen - Energizing the path to net zero  Ryan Chieng, Deloitte China Hydrogen CoE Leading Partner
11:00-11:20	Introduction to Caterpillar Hydrogen Internal Combustion Engine Power Generation Technology Yu Yongtang, Senior industry manager of Caterpillar Electric Power Division
11:20-11:40	<b>Technical Route and Commercialization Exploration of Hydrogen Energy Heavy Truck Jiang Bin</b> , Deputy General Manager of Marketing Departmen, Beijing Nowgen Technology
11:40-12:00	Thoughts on the Development of Hydrogen Energy in Natural Gas Enterprises Song Pengfei, Technical Expert and Senior Engineer of CNOOC Gas and Power Group



## 专题论坛三

主持人



徐文辉 中国能源研究会氢能专业委员会秘书长 国电投(广东)综合智慧能源创新研究院总经理

国家电投综合智慧能源研究院有限公司院长、总经理,国家电投广东公司(海外公司)氢能领导小组常务副组长、专家委员会委员,中国能源研究会氢能专业委员会秘书长,国际清洁能源论坛(澳门)理事、横琴联络办主任。

开场致辞



徐 俊 武进区委常委、西太湖科技产业园党工委书记

常州氢湾推介



牛 明 常州西太湖科技产业园管委会招商局局长

演讲嘉宾



段东平 中国科学院过程工程研究所研究员

中国科学院大学岗位教授及博士生导师,科技部国家可持续发展实验区专家委员会委员,中国无机盐工业协会副会长兼锂盐行业分会会长及熔盐储能专业委员会主任,《黄金科学技术》编委会副主任。



**王 刘** 全国燃料电池及液流电池标准化技术委员会副秘书长

主要从事新能源领域如氢能、燃料电池、锂电池、生物质能等产品及工程的检测、 认证、评价及标准化工作。从事燃料电池相关工作 20 余年。

## **Panel III**

Moderator

#### Xu Wenhui

# Secretary-General, Hydrogen Energy Professional Committee of China Energy Research Society

President and General Manager of the China National Nuclear Corporation Integrated Smart Energy Research Institute Co., Ltd. Executive Deputy Leader and Expert Committee Member of the Hydrogen Energy Leadership Group at China National Nuclear Corporation Guangdong Company (Overseas Company) Secretary-General of the Hydrogen Energy Professional Committee of the China Energy Research Association Director of the International Clean Energy Forum (Macau) Director of the Hengqin Liaison Office.

Keynote Speeches

## **Duan DongPing**

#### Researcher, Institute of Process Engineering, Chinese Academy of Sciences

Post professor and doctoral supervisor of the University of the Chinese Academy of Sciences, member of the Expert Committee of the National Sustainable Development Experimental Zone of the Ministry of Science and Technology, vice chairman of the China Inorganic Salt Industry Association and chairman of the lithium salt industry branch, director of the fused salt energy storage professional committee, and deputy director of the editorial board of Gold Science and Technology.

### **Wang Gang**

# Deputy secretary, National Technical Committee 342 on Fuel Cell and Flow Battery of Standardization Administration of China

Wang Gang, engaged in the field of new energy such as hydrogen energy, fuel cells, lithium batteries, biomass energy and other related work for more than 20 years.



韦 虹 吉利汽车动力研究院新技术开发部部长

浙江动力总成研究院新技术开发部部长、吉利氢气内燃机项目总监、前瞻技术 研究负责人。



王 英 中汽创智科技有限公司新能动力事业部首席技术官

在动力电池、燃料电池领域深耕长达27年,掌握世界领先的动力系统技术,具有丰富的研发及量产经验。尤其专长于膜电极,燃料电池系统设计。



詹伟祥 德勤中国氢能卓越中心主管合伙人

德勤中国氢能卓越中心主管合伙人,对氢能行业有深入的了解,精通行业惯例,曾为多个能源类企业提供上市,大型收购及重组服务,积攒了丰富的行业重难点以及实务处理经验。



于永堂 卡特彼勒电力事业部资深行业经理

负责卡特彼勒燃气发电项目的咨询工作。一直致力于石油燃气发动机及燃气发 电机组方面的技术相关工作。他在燃气发电机组的调试和销售方面有丰富的经 验,发起并深度参与了卡特彼勒燃气机组针对中国市场的应用和开发。



姜 斌 北京氢璞创能科技有限公司市场部副总经理

多年从事氢能与燃料电池市场研究与项目开发经验。



宋鹏飞 中海石油气电集团有限责任公司技术专家、氢能资深工程师

中海石油气电集团有限责任公司技术专家、氢能资深工程师,中国海油集团公司氢能重大专项牵头人、中国海油最早一批氢能研究者。

## **WEI Hong**

# Director of New Technology Development and Hydrogen Project, Geely Automotive Power Research Institute

Director of the New Technology Development Department at Zhejiang Powertrain Research Institute, Project Director for Geely's Hydrogen Internal Combustion Engine Project, and Head of Forward-Looking Technology Research.

#### **Wang Ying**

#### CTO of New Energy Power Division of China Automotive Innovation Corporation

Dr. Wang Ying has been deeply involved in the fields of power cells and fuel cells for 27 years, mastering world leading power system technology and possessing rich experience in research and development and mass production. Especially specialized in membrane electrode and fuel cell system design.

#### **Ryan Chieng**

#### **Deloitte China Hydrogen CoE Leading Partner**

Ryan Chieng is the Managing Partner of Deloitte China's Hydrogen Excellence Center. He possesses a profound understanding of the hydrogen energy industry, is well-versed in industry standards, and has provided services for numerous energy companies related to IPOs, major acquisitions, and restructuring. He has accumulated a wealth of experience in addressing industry challenges and practical matters.

## Yu Yongtang

#### Senior industry manager of Caterpillar Electric Power Division

Mr. Yu Yongtang is currently in charge of the consulting work of Caterpillar gas power generation projects. he has been committed to the technical related work of oil and gas engines and gas generator sets. Mr. Yu has rich experience in the commissioning and sales of gas generator sets, and has initiated and deeply participated in the application and development of Caterpillar gas generator sets for the Chinese market.

#### **Jiang Bin**

#### Deputy General Manager of Marketing Departmen, Beijing Nowgen Technology

Many years of experience in hydrogen and fuel cell market research and project development.

## Song Pengfei

#### Technical Expert and Senior Engineer of CNOOC Gas and Power Group

Mr. SONG Pengfei is a Senior Engineer and a technical expert in the China Offshore Oil, Gas, and Electric Group Co., Ltd. He is a senior engineer in hydrogen energy, the leader of China Offshore Oil Group's major hydrogen energy project, and one of the earliest researchers in hydrogen energy at China Offshore Oil Group.

# 专题论坛

# 绿色金融与可持续投资论坛

9月14日(星期四)下午14:00-17:30

② 常州新城希尔顿酒店二层 帝景厅

# 专题论坛四

——绿色金融赋能绿色发展

主持人: 束兰根 江苏省金融业联合会绿色金融专业委员会主任、中研绿色金融研究院首席学术专家

14:00-14:10	<b>开场致辞 孙益锋</b> 武进区委常委、副区长,中以常州创新园党工委书记、管委会主任
14:10-14:30	全球终端使用部门转型路径及投资需求分析 肖梦竺 国际可再生能源署世界能源转型展望项目官员
14:30-14:50	<b>能源金融与可持续投资 张晓蕊</b> 普华永道气候变化与可持续发展合伙人
14:50-15:10	<b>提升绿色金融助力绿色发展质效的若干思考</b> <b>董善宁</b> 江苏银行绿色金融部副总经理
15:10-15:30	以绿色金融服务区域经济高质量发展 董 丽 光大银行南京分行公司金融部副总经理
15:30-15:50	把握清洁能源发展和高排放产业转型中的金融新机遇 王钦成 中国银行江苏省分行高级产品经理
15:50-16:10	电改背景下资本市场助力新型电力系统建设 查 浩 申万宏源研究公用事业首席分析师
16:10-16:20	茶歇
16:20-17:30	圆桌讨论: 金融服务绿色发展
	裘孝锋 中金公司研究部 董事总经理
	陈庭燕 中车国创投资部总经理
	董善宁 江苏银行绿色金融部 副总经理
	张晓蕊 普华永道气候变化与可持续发展合伙人

# **Special Forum**

## **Green Finance and Sustainable Investment Forum**



(L) 14:00-17:30 p.m , September 14, 2023 (Thursday)



Empire Ballroom, 2nd Floor, Hilton Changzhou

# **Panel IV**

#### **Green Finance Fostering Green Development**

Moderator: Shu Langen, Director of the Green Finance Committee of Jiangsu Financial Industry Federation

14:00-14:10	Opening Remarks
14:10-14:30	<b>Transition Pathway and Investment Demand Analysis of Global End-Use Sectors Xiao Mengzhu</b> , Project Officer, World Energy Transitions Outlook, IRENA
14:30-14:50	Energy Finance and Sustainable Investment
	Crystal Zhang, Partner of Climate Change and Sustainable Development, PwC
14:50-15:10	Some Reflections on Enhancing Green Finance to Improve the Quality and Efficiency of Green Development
	<b>Dong Shanning</b> , Deputy General Manager of the Green Finance Department, Bank of Jiangsu
15:10-15:30	Supporting High-Quality Regional Economic Development Through Green Financial Services
	<b>Dong Li</b> , Deputy General Manager of the Financial Department, Nanjing Branch, Everbright Bank
15:30-15:50	Seize New Financial Opportunities in the Development of Clean Energy and the Transformation of High-emission Industries
	Wang Qincheng, Senior Product Manager, Bank of China Jiangsu Branch
15:50-16:10	Under the Background of Power Reform, The Capital Market Helps the Construction of New Electricity Systems
	<b>Zha Hao</b> , Chief Analyst, Utilities of SWS Research
16:10-16:20	Tea Break
16:20-17:30	Roundtable Discussion: Financial Services for Green Development
	Qiu Xiaofeng, Managing Director of Research Department, China International Capital Corporation
	Chen Tingyan, General Manager of Investment Department, CRRC Capital Management Co.,Ltd
	<b>Dong Shanning</b> , Deputy General Manager of the Green Finance Department, Bank of Jiangsu
	Crystal Zhang, Partner of Climate Change and Sustainable Development, PwC

# 专题论坛四

主持人



南京大学新金融研究院高级研究员,江苏大学财经学院产业教授,南京审计大学金审学院特聘教授,江苏省"人才333工程"科技企业家。现任江苏省金融业联合会绿色金融专委会主任,中研绿色金融研究院首席专家。

开场致辞



**孙益锋** 武进区委常委、副区长 中以常州创新园党工委书记、管委会主任

油讲喜宜



**肖梦竺** 国际可再生能源署世界能源转型展望项目官员

目前任职国际可再生能源署旗舰报告《世界能源转型展望》项目官员。集中于部门耦合,模型耦合,政策工具及投资分析以实现净零能源系统及长期能源转型情景分析。



张晓蕊 普华永道气候变化与可持续发展合伙人

普华永道北京 ESG 服务部合伙人,专注于基础设施、TMT 领域及食品饮料行业的 ESG 碳中和战略及咨询服务,拥有 16 年咨询服务经验。

# **Panel IV**

Moderator

## **Shu Langen**

#### Director of the Green Finance Committee of Jiangsu Financial Industry Federation

Senior Research Fellow of New Finance Research Institute of Nanjing University, Industry Professor of School of Finance and Economics of Jiangsu University, Distinguished Professor of Financial Examination College of Nanjing Audit University, and Technology Entrepreneur of "Talent 333 Project" of Jiangsu Province. He is currently the director of the Green Finance Committee of Jiangsu Financial Industry Federation and the chief expert of China Research Institute of Green Finance.

Keynote Speeches

## Xiao Mengzhu

#### Project Officer, World Energy Transitions Outlook, IRENA

Mengzhu Xiao works currently as programme officer on IRENA flagship report World Energy Transitions Outlook since October 2022 at Innovation and Technology Centre. Her working fields and research interests are focused on sector coupling, model coupling, policy instruments and investments analysis towards net-zero emission energy system and long-term energy transition scenarios.

## **Crystal Zhang**

#### Partner of Climate Change and Sustainable Development, PwC

Crystal Zhang is a Partner of ESG – Climate & Sustainability in PwC Beijing branch with over 16 years of experience in advisory services.



负责超过 4000 亿元绿色金融业务的经营管理和研究工作。现兼任 UNEPFI 银行理事会中东亚地区代表理事、人民银行绿色金融标准制定工作组成员、中国银行业协会"双碳"目标专家工作组专家。



光大银行南京分行公司金融部副总经理,负责绿色金融工作推动。长期从事银行对公信贷工作,熟悉银行信贷业务相关政策法规、产品服务及工作流程。



王钦成 中国银行江苏省分行高级产品经理

上海交通大学国际金融学士、南京大学项目管理硕士,金融从业超过20年,长期服务大型集团、上市公司等客群,主要负责银团贷款、并购贷款、结构化融资、跨境金融等业务,具有丰富的公司信贷业务经验。



**查 浩** 申万宏源研究公用事业首席分析师

清华大学管理学硕士,申万宏源公用事业首席,公用事业和环保组小组主管, 2017年加入上海申银万国证券研究所有限责任公司,拥有6年电力行业研究经 验。

圆桌讨论



**裘孝锋** 中国国际金融股份有限公司研究部董事总经理

中国国际金融股份有限公司研究部董事总经理,17年证券从业经验。在油气、能源转型和化工新材料的研究上面积累了丰富的经验。研究具有系统性、前瞻性和开创性。

## **Dong Shanning**

#### Deputy General Manager of the Green Finance Department, Bank of Jiangsu

Responsible for the operational management and research of green finance business exceeding 400 billion RMB. Also serves as a Representative Director for the Middle East and Asia Region at UNEPFI Banking Commission, a member of the People's Bank of China's Green Finance Standards Development Working Group, and an expert in the "Dual Carbon" Goal Expert Working Group of the China Banking Association.

#### **Dong Li**

#### Deputy General Manager of the Financial Department, Nanjing Branch, Everbright Bank

Responsible for Promoting Green Finance Initiatives. With Extensive Experience in Corporate Credit Operations at the Bank, She Is Well-Versed in Banking Credit Policies, Regulations, Product Services, and Workflow Processes.

## **Wang Qincheng**

#### Senior Product Manager, Bank of China Jiangsu Branch

Bachelor of International Finance from Shanghai Jiaotong University, Master of Project Management from Nanjing University, has more than 20 years of experience in corporate credit management, serving corporate customers like large groups and listed companies, mainly in charge of syndicated loans, merger and acquisition loans, structured financing, cross-border finance etc.

#### **Zha Hao**

#### Chief Analyst, Utilities of SWS Research

Hao Zhao, Master of Management from Tsinghua University, Chief of Shenwan Hongyuan Public Utilities, Head of Public Utilities and Environmental Protection Group, joined SWS Research Co.,LTD. in 2017 and has 6 years of research experience in the electricity systems.

Dialogue

## **Qiu Xiaofeng**

#### Managing Director of Research Department, China International Capital Corporation

He has 17 years of experience in industry research and wins the top two position of New Fortune Best Analyst in petrochemical industry for 12 years in a row. He has rich experience in the research of crude oil, petrochemical and chemical industries and establishes a framework system for crude oil price and cyclical industry fluctuations. His research is systematic and pioneering.



陈庭燕 中车国创投资部总经理

拥有 15 年境内外产业投资管理经验。曾担任上市公司高管,负责投资并购及资本运作,管理产业基金全生命周期,通过产业基金的持续并购助力上市公司实现市值管理。清华大学电子工程系本科、硕士。



#### 董善宁 江苏银行绿色金融部副总经理

负责超过 4000 亿元绿色金融业务的经营管理和研究工作。现兼任 UNEPFI 银行理事会中东亚地区代表理事、人民银行绿色金融标准制定工作组成员、中国银行业协会"双碳"目标专家工作组专家。



张晓蕊 普华永道气候变化与可持续发展合伙人

普华永道北京 ESG 服务部合伙人,专注于基础设施、TMT 领域及食品饮料行业的 ESG 碳中和战略及咨询服务,拥有 16 年咨询服务经验。

## **Chen Tingyan**

#### General Manager of Investment Department, CRRC Capital Management Co.,Ltd

With 15 years of domestic and international industrial investment management experience. Previously held executive positions in a listed company, responsible for mergers and acquisitions, capital operations, and managing the entire lifecycle of industrial funds. Contributed to the market value management of the listed company through continuous mergers and acquisitions facilitated by industrial funds. Graduated from the Department of Electronic Engineering at Tsinghua University with both a bachelor's and master's degree.

## **Dong Shanning**

#### Deputy General Manager of the Green Finance Department, Bank of Jiangsu

Responsible for the operational management and research of green finance business exceeding 400 billion RMB. Also serves as a Representative Director for the Middle East and Asia Region at UNEPFI Banking Commission, a member of the People's Bank of China's Green Finance Standards Development Working Group, and an expert in the "Dual Carbon" Goal Expert Working Group of the China Banking Association.

## **Crystal Zhang**

#### Partner in Climate Change and Sustainable Development, PwC

Crystal Zhang is a Partner of ESG – Climate & Sustainability in PwC Beijing branch with over 16 years of experience in advisory services.

# 专题论坛

# 能源数字化智能化论坛

9月14日(星期四)下午14:00-16:30

② 常州新城希尔顿酒店二层 新城大宴会厅 BC

# 专题论坛五

——向新驱动,赋能未来能源

主持人: 王晓东 国网(苏州)城市能源研究院副总经理

14:00-14:10	<b>开场致辞</b> 朱慧峰 武进区人民政府副区长
14:10-14:30	未来能源电力数字化发展的最新趋势判断 孙艺新 国网能源研究院能源数字经济研究所副所长
14:30-14:50	融合数字技术和电力电子技术,推动能源革命,共建绿色美好未来 舒震寰 华为数字能源中国区智能光伏解决方案总工程师
14:50-15:10	智慧能源网,助力绿色可持续发展 翟宇博 能链碳中和事业部总经理
15:10-15:30	数字化助力企业双碳战略 吕志勇 施耐德电气可持续发展咨询业务负责人、可持续发展首席专家
15:30-15:50	"智能与低碳",企业可持续发展的双引擎 吴 丹 远光能源互联网产业发展(横琴)有限公司副总经理
15:50-16:10	智慧能源双碳平台助力行业低碳高质量发展 郭雪梅 珠海仪能科技有限公司副董事长
16:10-16:30	区块链技术与能源数字化转型 张 <b>勇</b> 上海纳净可零科技有限公司大中华区业务总裁

# **Special Forum**

# **Digital and Intelligent Energy Forum**



(Thursday) 14:00-16:30 p.m., September 14, 2023 (Thursday)



Futureland Grand Ballroom BC, 2nd Floor, Hilton Changzhou

# **Panel V**

## **Innovation Empowers Future Energy**

Moderator: Wang Xiaodong, Vice General Manager, State Grid (Suzhou) City & Energy Research Institude

14:00-14:10	Opening Remarks
14:10-14:30	The Latest Trend Judgment of Digital Development in Energy Power Sun Yixin, Deputy director of the Energy Digital Economy Research Institute, SGERI
14:30-14:50	Convergence of Data Technologies and Power Electronics Technologies to Promote the Energy Revolution and Build a Green and Bright Future Together
	<b>Shu Zhenhuan</b> , Chief engineer of Huawei Digital Energy Smart PV Solution in China, Huawei Digital Energy Technology Co., Ltd.
14:50-15:10	New Energy Link for Green and Sustainable Development Zhai Yubo, General Manager of Carbon Neutrality Business of Newlink
15:10-15:30	Digitalization Assists Enterprises Achieve Carbon Neutrality Goals Leon LV, Principal Consultant, Sustainability, Schneider Electric
15:30-15:50	"Intelligence and low-carbon", a dual engine for sustainable development of enterprises Wu Dan, Vice President, YG Energy Internet Industry Development (Hengqin)
15:50-16:10	ElCloud Smart Energy and Carbon Management System to Power Industries' Low-carbon and High-quality Development
	Guo Xuemei, Vice Chairman, Zhuhai ENACS Technologies
16:10-16:30	Blockchain Technology and Energy Digital Transformation  James Zhang, President of Greater China Business of Shanghai NanoJClean Technology

# 专题论坛五

#### 主持人



王晓东 国网(苏州)城市能源研究院副总经理

长期从事电力系统生产运行工作,现从事新型电力系统建设、综合能源、用户侧节能降碳解决方案等方向的研究。主持或参与的项目获三项省部级科技进步 奖、两项省部级管理创新奖。

#### 致辞嘉宾



朱慧峰 武进区人民政府副区长

#### 演讲嘉宾



**孙艺新** 国网能源研究院能源数字经济研究所副所长

主要从事能源电力数字经济领域的战略研究、政策研究与理论研究,承担能源电力数字化转型战略咨询、开拓能源电力大数据应用;先后主持科技项目、管理咨询项目 200 余项,发表个人专著 2 部,主编及参与编写著作 10 余部。



## 舒震寰 华为数字能源中国区智能光伏解决方案总工程师

参与多项行业技术创新、智能光伏解决方案架构设计等。致力于将华为数字信息技术、AI 技术、电力电子技术等智能化技术与能源技术相结合,提升从发电侧到用电侧的能源效率和智能化水平,推动能源行业数字化转型。

#### **Panel V**

Moderator

## **Wang Xiaodong**

#### Vice General Manager, State Grid (Suzhou) City & Energy Research Institude

Senior Engineer with extensive experience in the operation and production of power systems. Currently involved in research related to the construction of new power systems, integrated energy, user-side energy conservation, and carbon reduction solutions. Has led or participated in projects that have received three provincial and ministerial-level scientific and technological progress awards and two provincial and ministerial-level management innovation awards.

Keynote Speeches

#### **Sun Yixin**

#### Deputy director of the Energy Digital Economy Research Institute, SGERI

He has mainly engaged in strategic research, policy research and theoretical research in the field of energy power digital economy, and undertook strategic consultation on energy power digital transformation, developing energy and power big data applications. He has presided over more than 200 scientific and technological projects and management consulting projects, published 2 personal monographs, edited and participated in the compilation of more than 10 books.

#### Shu ZhenHuan

# Chief engineer of Huawei Digital Energy Smart PV Solution in China, Huawei Digital Energy Technology Co., Ltd.

Participate in technological innovation in multiple industries, Huawei product planning, and smart PV solution architecture design. Huawei is committed to integrating intelligent technologies such as digital information technologies, AI technologies, and power electronics technologies with energy technologies to improve energy efficiency and intelligence from the power generation side to the power consumption side and promote digital transformation of the energy industry.



**翟字博** 能链碳中和事业部总经理

在能源转型及清洁能源领域工作超过 10 年,曾领导和实施多个国际能源创新项目,协助能源数字化企业能链制定多项交通领域标准及碳减排方法学。曾受邀参加 COP26 及 COP27 两届联合国气候大会,分享中国企业的低碳创新实践。



**吕志勇** 施耐德电气可持续发展咨询业务负责人 可持续发展首席专家

在能源管理领域拥有十四年的丰富经验,其中8年专注于数字化能源管理转型, 最近5年,担任施耐德电气可持续发展咨询负责人,为多家知名企业提供相关 咨询及落地服务,涉及新能源、地产、制造等多个行业。



吴 丹 远光能源互联网产业发展(横琴)有限公司副总经理

具有 18 年电网能源行业信息化经验。涉及领域包括: 电网生产、电网营销、电网 GIS、电力市场、双碳等方面的产品与项目建设。



郭雪梅 珠海仪能科技有限公司副董事长

加拿大 Concordia 大学商学院管理信息系统学士学位。珠海仪能科技有限公司副董事长,江西仪能新能源微电网协同创新有限公司董事长,吉安市侨联副主席。



张 勇 上海纳净可零科技有限公司大中华区业务总裁

负责纳净可零大中华区业务拓展,在食品、能源、汽车、零售商超、政府监管等 领域拥有丰富的区块链行业解决方案及落地经验,参与并负责包括沃尔玛中国食 品安全可追溯平台、新能源电池全生命周期管理以及汽车供应链管理等项目。

#### Zhai Yuho

#### **General Manager of Carbon Neutrality Business of Newlink**

He has been working in the field of energy transition and clean energy for more than 10 years and has led and implemented many international energy innovation projects. and assisted Newlink to develop many standards and carbon reduction methodologies in the transport sector. He has been invited to participate in COP26 and COP27 to share low-carbon innovation practices of Chinese companies.

#### **Leon LV**

#### Principal Consultant, Sustainability, Schneider Electric

Mr. LV has 14 years of extensive experience in energy management, with 8 years focused on digital transformation of energy management. In the past 5 years, he has been the Principal Consultant of Sustainability at Schneider Electric, providing consultations and implementation services to renowned companies across industries including renewable energy, real estate, and manufacturing.

#### **Wu Dan**

#### Vice President, YG Energy Internet Industry Development (Hengqin)

With 18 years of experience in the informationization of the grid energy industry. Areas of expertise include product and project development in grid production, grid marketing, grid GIS, electricity markets, dual carbon, and more.

#### **Guo Xuemei**

#### Vice Chairman, Zhuhai ENACS Technologies

A Bachelor's degree in Management Information Systems from Concordia University's John Molson School of Business in Canada. Vice Chairman of Zhuhai ENN Technology Co., Ltd., Chairman of Jiangxi ENN New Energy Microgrid Collaborative Innovation Co., Ltd., and Vice Chairman of Ji'an Overseas Chinese Federation.

#### **James Zhang**

#### President of Greater China Business of Shanghai NanoJClean Technology

He is now responsible for nanoJClean's business development in the Greater China region. He has rich experience in blockchain industry solutions and implementation in food, energy, automotive, retail superstores, government regulation, etc. He has participated in and is responsible for projects including Walmart China's food safety traceability platform, new energy battery full life cycle management, and automotive supply chain management.

# 专题论坛

# 城市能源与智慧交通创新论坛

9月14日(星期四)下午14:00-16:10

② 常州新城希尔顿酒店二层 新城大宴会厅 A

# 专题论坛六

——构建可持续城市生态

主持人: 王晓明 中科院科技战略咨询研究院产业科技创新研究部部长 / 研究员

14:00-14:10 开场致辞

吕海峰 中国城市发展研究会可持续城市专业委员会会长

张征宇 武进区人民政府副区长

14:10-14:30 新型交通能源设施多方协同发展

刘小诗 中国电动汽车百人会常务副秘书长

14:30-14:50 充电市场研究

郑隽一 万帮数字能源股份有限公司副董事长

14:50-15:10 技术创新赋能电动汽车高质量发展

贾 刚 理想汽车对外事务部高级总监

15:10-15:30 新能源汽车"城市出行能源服务"的创新与实践

王水利 蓝谷智慧(北京)能源科技有限公司党委书记、董事长,总经理

15:30-15:50 数字出行助力城市交通低碳转型

唐艳红 滴滴发展研究院资深研究员

15:50-16:10 交通领域双碳目标的关键与方向

姚 娟 西南石油大学 高级经济师 / 讲师



# **Special Forum**





(L) 14:00-16:10 p.m., September 14, 2023 (Thursday)



Futureland Grand Ballroom A, 2nd Floor, Hilton Changzhou

## **Panel VI**

#### **Building Sustainable Cities**

Moderator: Wang Xiaoming, Institutes of Science and Development, Chinese Academy of Sciences (CASISD), Research Department of Industry Technology Innovation, Director, Research Fellow.

14:00-14:10	Opening Remarks  Lyu Haifeng, President of Sustainable City Committee of China Research Society of Urban Development
14:10-14:30	Collaborative Development of New Transportation Energy Facilities Liu Xiaoshi, Executive Deputy Secretary-General, ChinaEV100
14:30-14:50	The Research of Charging Market Unique Zheng, Vice Chairman of Wanbang Digital Energy
14:50-15:10	Empowering High-Quality Development of Electric Vehicles through Technological Innovation  Jia Gang, Senior Director of External Affairs, Li Auto
15:10-15:30	Innovation and Practice of New Energy, Automobiles, Urban Mobility, and Energy Services Wang Shuili, Party Secretary, Chairman and General Manager of Lanyuan Smart Energy (Beijing) Technology
15:30-15:50	Digital Travel Assists Low Carbon Transformation of Urban Transportation  Tang Yanhong, Senior Researcher, Didi Development Research Institute
15:50-16:10	Critical Paths for Achieving the "Dual Carbon" Goal in Transportation  Yao Juan, Senior Economist/Lecturer, Southwest Petroleum University



# 专题论坛六

#### 主持人



王晓明 中科院科技战略咨询研究院产业科技创新研究部部长/研究员

中国科学院科技战略咨询研究院研究员,先后任职重任部研究员和科技发展战略研究所副所长,现任产业科技创新研究部部长,主要研究产业科技融合创新,重点研究战略性新兴产业和未来产业、数字经济和绿色低碳产业。

致辞喜宝



**吕海峰** 中国城市发展研究会可持续城市专业委员会会长

现任全球人居环境论坛秘书长、中国城市发展研究会可持续城市专业委员会会长、深圳美好城市研究院院长。致力于推动可持续城市与人居环境已有 20 年历史。GFHS 于 2015 年获得了联合国经社理事会特别咨商地位。



张征宇 武进区人民政府副区长

演讲嘉宾



刘小诗 中国电动汽车百人会常务副秘书长

有多年的机构、行业和企业的丰富经验。先后再美国纽约州立大学研究基金会、 美国科比亚咨询公司、韩国三星(中国)投资公司、中国国际金融股份有限公司、 石油工业部、中国石化等中国金融机构、政府部门等工作任职。

#### **Panel VI**

Moderator

## **Wang Xiaoming**

Institutes of Science and Development, Chinese Academy of Sciences (CASISD), Research Department of Industry Technology Innovation, Director, Research Fellow.

Institutes of Science and Development, Chinese Academy of Sciences, Research Fellow. He successively served as a research fellow of the Department of Responsibility and the deputy director of the Institute of Science and Technology Development Strategy. He is currently the director of the Research Department of Industrial Technology Innovation. He mainly studies industrial technology integration and innovation, focusing on strategic emerging industries and future industries, digital economy, and low-carbon industries.

Opening Remarks

## Lyu Haifeng

# President of Sustainable City Committee of China Research Society of Urban Development

Mr. Lyu Haifeng serves as the Secretary General of Global Forum on Human Settlements (GFHS), President of Sustainable City Committee of China Research Society of Urban Development, and President of Shenzhen Better City Institute. He graduated from Lanzhou University. Mr. Lyu has dedicated to promoting sustainable cities and human settlements for 20 years. Under his leadership, GFHS, a non-profit international organization, was granted the Special Consultative Status with ECOSOC in 2015.

Keynote Speeches

#### Liu Xiaoshi

#### **Executive Deputy Secretary-General, ChinaEV100**

Mr. Liu has multiple years of rich experiences in institutions, industries and businesses. Mr. Liu's international experience including working with Research Foundation of State University of New York(Financial Analysis, Incubator and Technology Transfer), Copia Consulting Company(USA) (World Bank Project Consulting), and Samsung (China) Investment Corporation (Engineering Projects).



郑隽一 万帮数字能源股份有限公司副董事长

东南大学电气工程学院博士在读,2016年加入万帮数字,主要负责公司政府关系、产业合作、学术研究、市场研究、媒体沟通、融资投资;担任创新中心总经理,负责创新中心成果转化、产业孵化等。



**王水利** 蓝谷智慧 (北京) 能源科技有限公司 党委书记、董事长, 总经理

超二十年汽车行业从业经验,汽车领域资深专家,在汽车、物流等产业有广泛的合作资源,对新能源汽车及新能源汽车衍生业务有着极为丰富的商业模式策划、项目落地与管理实践经验。



**唐艳红** 滴滴发展研究院资深研究员

南开大学金融学硕士,现任滴滴发展研究院资深研究员。此前先后在管理咨询、高校、互联网企业有过超十年研究经验。



姚 娟 西南石油大学 高级经济师 / 讲师

主要从事工业绿色低碳发展、能源低碳管理与创新等方向研究。先后主研国家 社科基金重大项目 1 项、国家科技重大专项 2 项、中国工程院战略研究与咨询 项目 1 项,主持省部级、市厅级科研项目 5 项,发表 CSSCI 论文多篇。

## **Unique Zheng**

#### Vice Chairman of Wanbang Digital Energy

unique zheng, PhD candidate in School of Electrical Engineering, Southeast University, joined Wanbang Digital in 2016, mainly responsible for the company's government relations, industrial cooperation, academic research, market research, media communication, financing and investment; Served as the general manager of innovation Center, responsible for the transformation of innovation center results, industry incubation, etc.

## **Wang Shuili**

# Party Secretary, Chairman and General Manager of Lanyuan Smart Energy (Beijing) Technology

He has more than 20 years of experience in the automotive industry, a senior expert in the automotive field, a wide range of cooperation resources in the automotive, logistics and other industries, and has extremely rich practical experience in business model planning, project landing and management of new energy vehicles and new energy vehicle derivative businesses.

## **Yanhong Tang**

#### Senior Researcher, Didi Development Research Institute

Tang Yanhong, a Master of Finance from Nankai University, currently serves as a Senior Researcher at the Didi Development Research Institute. She has over ten years of research experience in management consulting, academia, and internet companies.

#### YaoJuan

#### Senior Economist/Lecturer, Southwest Petroleum University

Mainly engaged in the research of industrial green and low-carbon development, energy low-carbon management and innovation. She has been the main researcher of 1 major project of the National Social Science Foundation, 2 major national scientific and technological special projects, 1 project of Strategic Research and Consulting Project of Chinese Academy of Engineering, and has presided over and completed 5 provincial and municipal scientific research projects, and has published several CSSCI papers.

# 常州·武进

# 常州概况 GENERAL INFORMATION OF CHANGZHON

常州

国际化智造名城 长三角中轴枢纽 谋划确定"532"发展战略 5 大中轴

- ■长三角交通中轴
- ■创新中轴
- ■产业中轴
- ■生态中轴
- ■文旅中轴

3 个中心

- 长三角产业科技 创新中心
- ■现代物流中心
- ■休闲度假中心

2 个示范区

- 城乡融合发展 示范区
- 统筹发展和安全示范区



# 两湖创新区 TWO LAKES INNOVATION ZONE

#### 从空间规划上看

"两湖"创新区以常州境内的长荡湖和滆湖(西太湖)为中心向四周辐射、包括金坛、钟楼、武进、溧阳等区域。

占地面积

-

1485平方公里

-

12个镇

5个街道

#### 从功能规划上看

即将构建"两湖、四带、五片、八组团"的城市样态,着力建设五大功能区。

5 功能 片区

国际智造区

创新产业区

中央活力区(核心区)

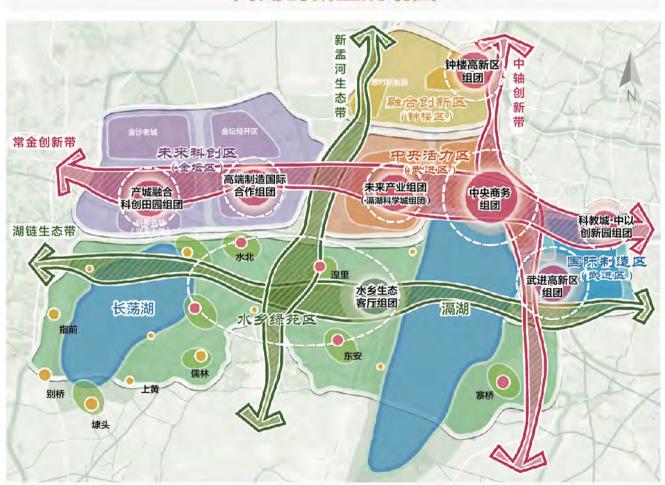
国际智造区

创新产业区

#### "两湖"创新区承载着常州的未来和希望 五年成势、十年成形、十五年成城

"两湖"创新区总体规划以世界眼光、国际标准、未来考量,通过三大主题定位"新城市""新产业""新人才"为核心,实现"生态创新区、最美湖湾城"的愿景目标。

# 两湖创新区规划图



武进印象 IMPRESSION OF WUIN 常州新能源之都首位区

吴文化发源地 苏南模式发源地

2022年全国综合实力百强区第三名(连续9次)

全国投资潜力百强区第一名

全国科技创新百强区第一名

规模以上工业企业超 2252 家

高新技术企业 1061家

上市企业 45 家

跨国公司地区总部和功能性机构 16 家

吸引 22 家世界500强企业投资项目 31 个

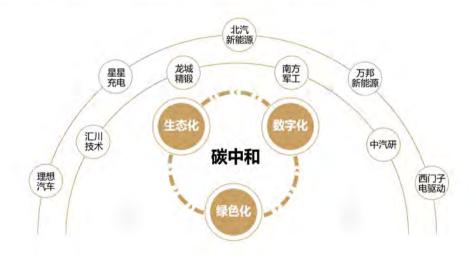
专精特新中小企业320家

强基工程 12 个

## 新能源之都首位区

#### 2023年常州市推出了《关于加快新能源之都建设的实施意见》的决策部署

2025年常州新能源领域产业规模超万亿元,资本市场新能源常州板块市值超万亿元。



为更好贯彻落实《江苏省碳达峰实施方案》和常州市《关于加快新能源之都建设的实施意见》,武进提前布局"碳中和"战略决策,推进武进区新能源产业升级,围绕绿色化、数字化、生态化,打造新能源"发、储、送、用"新装备、新产品、新业务、新模式、新基地,把武进建设成常州新能源之都首位区。

武进作为"苏南模式的发源地",近年来,在理想汽车、万帮数字能源、恒立液压、苏文电能、小牛电动、瑞声科技为代表的一批龙头企业带领下,武进新能源产业发展迅猛。尤其是传统燃油车零部件企业全面跟进,快速构建起新能源汽车供应链,从上游材料、电机和电控,到整车、充电设备,再到其他配套零部件、检测实验室,如汇川技术、龙城精锻、南方精工、中汽研等,形成了上中下游高度协同、相互支撑的产业生态。

## 95X体系建设:



重点产业



新兴产 业名片



武进是苏南工业强区,实体经济发达,产业门类齐全,拥有全部41个工业大类中的31个,666个工业小类中的306个。

武进坚持"以智为先、以造为基、以城促产、以产兴城"的发展定位,以高端化、智能化、绿色化、服务化、品牌化为引领,夯实先进制造产业基础,擦亮智能制造产业底色,重点发展"95X"产业体系。

#### 九大重点产业(

圖 高端装备

Ų, 医疗健康

型 新一代信息技术

△ 新能源

**夕节能环保** 

@ 智电汽车

**邻新材料** 

☞ 绿色精品钢

🖺 纺织服装

#### 五张产业名片《

#### 智电汽车产业

在轻量化、电驱电控、智能网联、 充电设备等关键领域,拥有一批以 理想汽车、汇川技术、万帮数字能 源为代表的技术领先企业。

#### 机器人产业

机器人产业领跑全国,全区工业机器人本体产量占全省70%,占全国1/4。涌现出安川、快客、征图、遨博、节卡等优秀机器人企业。

#### 集成电路产业

以化合物半导体芯片为主导, 汇聚了包括承芯半导体、纵慧 芯光、圣创半导体、太阳诱电、 瑞声科技等知名企业。

## 医疗健康产业

全国、全省重要的新型医疗器械生产基地,聚集500多家健康产业相关企业,发展骨科、齿科、有源手术工具、康复器材、心血管植入物和细胞治疗等方向,形成完备的科技创新、产业发展和经营流通体系,汇聚了创生医疗、亚邦医药、钱璟康复、中进医疗等知名企业。

#### 碳材料产业

发展以石墨烯为主的碳材料产业,有"全国石墨烯看江苏,江苏石墨烯看武进"的美誉。石墨烯产业已形成14项全球首创成果,聚集全省80%的石墨烯龙头企业,拥有全国最全的石墨烯产业链,全球最多的知识产权集聚区,涌现出富烯科技、二维碳素、第六元素等知名企业。

## X-未来产业●

数字经济

氢能源

细胞治疗

绿色双碳

军民融合



# 万帮数字能源(星星充电)

# 更懂运营更智能

万帮数字能源两大核心品牌: 星星充电 | 星星能源

星星充电,亚洲数字能源领域头部独角兽企业,总部位于江苏常州,专注于新能源汽车充电设备研发制造,产品线涵盖交直流设备、充电枪头、电源模块、智能电柜、换电设备等,掌握着智能控制、物联网、大功率定制等核心研发能力,为包括但不限于主机厂、公交、地产、政府、机场、物流、特种交通、能源公司、车主车队与充电运营商等行业客户,提供设备、平台、用户、数据运营等综合服务,结合风光储充、智能微网、智能运维等优势,打造用户充电、用能全生命周期平台。

星星能源,实现从新能源汽车充电到能源生产、存储、管理、消纳、交易的全产业链布局和持续升级,利用工业互联网技术,最终构建集"充电网、用户网、能源网"于一体的三网融合平台,完成充电网-智能微网-移动能源网的升级融合,以此来实现整个城市绿色数字"零碳"运行,助力我国早日实现"双碳"目标。

# 电价更便宜 减排更彻底

# 充电网——智能微网——移动能源网

从充电到电力**生产、存储、管理、消纳、交易**的新能源全链路产业升级



电力生产

分布式光伏电站 光伏车棚



电力存储

发电侧、用户侧储能 共享储能新模式



电力管理

智慧能源管理系统能源管理驾驶舱



电力消纳

高效充电网络 有序充电 光储充放智慧能源网



电力交易

需求侧响应 绿电交易



# 打造风光储氢全业态 探索智慧能源新场景





全球累计装机近

46+<sub>GW</sub>



投运全球风力发电场项目

图 800个



产生的环境效益相当于每年减少二氧化碳排放

1.15亿吨 等于每年再造森林75万公顷





#### 新渔业 - 效益提升

设施化养殖,科学化方案,渔业人均 管理养殖面积提升超20倍





## 新能源 - 降本增效

柔性专利设计,智能光伏运营,支架、 管桩成本降低40%以上,土地利用率超 90%

大跨度 高净空 强抗风 0挠度 最大跨度达60米 最大高净空达10米 最高抗风能力13级 挠度近似0,





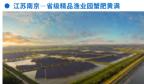
#### 新农村-可持续发展

多元化产业叠加,可持续发展,助力乡村振 兴,已在江苏、江西、安徽、广西、广东、山东、湖 北、湖南、内蒙古、黑龙江等地建设52座以渔光 -体为主的电站,并网规模超过3.4GW



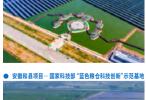
# 通威渔光一体产业园

通威新能源是通威光伏终端业务平台,以"光伏改变世界"为核心理念,专注光伏电站投资开发、规划设计、智能运维的全投资业务。整合渔业、光伏新能源资源优势,发展"渔光一体"战略,创新"上可发电,下可养鱼"的通 威"渔光一体",真正实现了农业与光伏高效协同发展。











# 通威新能源 52+

以"渔光一体"为主的光伏电站项目









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## 战略布局

STRATEGIES

#### 双良节能降碳解决方案

#### 能源供给侧

- Ø 构建企业低碳/零碳供能系统
- Ø 光伏绿电零碳供能解决方案
- Ø 燃气替煤低碳供能解决方案
- Ø 绿电智能制氢系统解决方案

# 能源需求侧

- Ø 低温余热余压回收综合利用节能降碳解决方案
- Ø 清洁能源供热节能降碳解决方案
- Ø 循环水空冷节水解决方案

- Ø 公共建筑节能解决方案
- Ø电能替代零碳解决方案
- Ø管理节能降碳解决方案

#### 支撑体系

#### 碳排放交易体系

#### 碳排放权交易市场

- Ø政府完善交易市场政策
- Ø 企业制定碳排放交易战略

#### 碳税



#### 绿色金融

#### 发展绿色金融工具

- Ø 绿色信贷
- Ø 绿色债券

Ø 绿色股权



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# 可靠电力 无限可能

# CATERPILLAR® 卡特彼勒

# Cat® (卡特) 燃气发电机组

# 功率范围 400 kW - 4.5 MW, 全线产品可25%掺氢运行全球装机容量高达 14,608 MW\*

\*过去 10 年内安装的燃气发电机组。

无论是行业还是应用,卡特彼勒都为全球的商业、企业、市政当局和其他客户提供新的发电技术。了解为什么Cat®(卡特)燃气发电机组能够提供维持业务运营所需的电力、效率和减排。







G3516H 燃气发电机组



CG260-16 燃气发电机组



CG170B-20 燃气发电机组

# G3516H 1250 kW 100% 纯氢内燃发电机组

#### 零碳排放

基于高效的天然气发电机组开发 100% 纯氢或 25% 掺氢天然气运行,该创新产品正在开创行业新标准。

卓越的功率密度和效率,适合电力平衡市场应用及低排放要求下的特定应用,总生命周期内极低的维护保养成本。



#### 卡特彼勒授权四家代理商在中国大陆地区销售卡特彼勒的全线产品及提供服务,分别是:

华北利星行机械 (北京) 有限公司 电话: 400-813-6688

代理区域:北京、天津、河北、黑龙江、辽宁、吉林、内蒙古、山西

利星行机械有限公司 电话: 400-821-3319 代理区域: 江苏、浙江、湖北、安徽、河南、山东、上海 信昌机器工程有限公司 电话: 400-830-3512

代理区域:香港、澳门、广东、广西、海南、福建、江西、湖南、新疆

易初明通投资有限公司 电话: 400-887-0829

代理区域:云南、贵州、四川、重庆、西藏、陕西、甘肃、宁夏、青海



更多详情,请扫描并 关注Cat<sup>®</sup>(卡特)电 力官方微信公众号。



# 远光智慧能源解决方案

# 用技术和智慧推动绿色能源发展

远光能源互联网产业发展(横琴)有限公司,是国网数科与远光软件专注于能源互联网行业发展的合资子公司。公司以能源时代变革为契机,以促进全社会实现碳达峰碳中和目标为导向,致力于园区、企业自动化、信息化、智能化、低碳化服务。产品及解决方案涵盖能源规划、建设、生产、运营、交易、消费、排放等产业链核心业务,在能源规划、园区/企业综合能源服务、能源运维、电力交易、虚拟电厂、低碳服务等领域获得多项成果和荣誉,公司用技术和智慧,助力企业数字化升级,推动支撑绿色低碳发展。



# 核心解决方案

碳资产管理解决方案

电力交易管理解决方案

能源站智慧运营解决方案

虚拟电厂运营管理解决方案

能源运维解决方案

电话: 400-1118-123 阿址: www.dian123.com



扫码关注



# 是时候进行 一场新的变革了





海克斯康官方网址 www.HexagonMl.com.cn

# 海克斯康R-evolution 通过智能数字技术推进绿色科技加速发展



风能

从风场规划、设计仿真、 生产制造、计量测试到安 装运维的数字化解决方案



太阳能

通过可操作的数字孪生打造智能、高效的光伏电站



氢能

氢燃料电池端到端数字化 解决方案



储能

数据驱动锂电池制造安 全、高效、可持续

# 第五届 未来能源大会

THE FIFTH
FUTURE ENERGY CONVENTION

# 绿色·持续·共生·向新

GREEN / SUSTAINABLE / SYMBIOTIC / FORWARD-LOOKING



未来能源大会官方网站 Official website of Future Energy Convention



手机扫码听同传 Mobile phone scanning code to listen to simultaneous interpretation