# **International Cooperation**

#### **Research Project**

We look forward to cooperating with leading scientists around the world on carbon neutral technologies.

- Carbon Neutrality and Energy System Transformation (CNEST) Program
- General research project

#### **Technology Alliance**



We jointly launched the International Joint Mission on Climate Change and Carbon Neutrality with leading multinational enterprises to promote international exchange and cooperation in strategic research, as well as technology research and application in related fields.

#### **Academic Forum**

#### • High-level Experts Dialogue



We invite top experts and scholars in low-carbon fields to share pioneering ideas of carbon neutrality.

#### Young Researchers Seminar

We bring together young researchers from all over the world to discuss carbon neutrality topics.

#### • Students Academic Exchange Activities

We organize various academic exchange events to support the growth of students.

# Technology Sparking a Green Future



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#### Introduction

The Institute for Carbon Neutrality, Tsinghua University (ICON) was established on September 22, 2021 as a global research institute advancing the achievement of carbon neutrality. It aims to facilitate technology innovations, applications and decision-making related to carbon neutrality through high-quality multidisciplinary research within the university, as well as through vibrant collaborations with national, regional, and local public and private partners.

#### **Chief Scientists**

## **HE Kebin**

Academician, Chinese Academy of Engineering Professor, Tsinghua University

Prof. He Kebin is the director of the Environment & Light and Textile Industries Engineering Division of Chinese Academy of Engineering, the vice chairman of the National Expert Committee for Ecology and Environmental Protection.

Prof. He is a leading expert on complex air pollution. His research focuses on the identification of particulate matters and complex air pollution, characterization of complicated emission sources and multi-pollutant control, and the coordinated control of air pollution and greenhouse gas emissions.



JIANG Peixue Academician of CAS

Vice president.Professor of Department of Energy and Power Engineering, Tsinghua University



**KANG Chongging** 

Dean and Professor, Department of **Flectrical** Engineering, Tsinghua University



**IIANG Yi** 

Academician of CAE Professor of School of Architecture. Tsinghua University



**OUYANG Minggao** 

Academician of CAS Professor of School of Vehicle and Mobility, Tsinghua University



Professor of

Chemical

Engineering,

**YANG Wantai** 

Academician of CAS Academician of CAE Dean of Institute for Department of Carbon Neutrality, Professor of School of Environment Tsinghua University Tsinghua University



**HE Kebin** 

LI Zheng

Dean of ICCSD, Professor of Department of **Energy and Power** Engineering, Tsinghua University



**ZHANG Xiliang** 

Director of 3E, Professor of Institute of Nuclear and New Energy Technology, Tsinghua University

# **Our Objectives**



Talent Cultivation Base for Carbon Neutrality

Domestic and

International Cooperation and



**Key Technology** 

Research Center for

Communication Platform for Carbon **Neutrality** 



High-end Think Tank Strategy Center for Carbon Neutrality

#### **Energy Supply**

#### **Low Carbon Energy and CCUS**

Aiming to solve key scientific problems in low-carbon power production and CO<sub>2</sub> capture, storage and utilization.

#### **New-type Power System**

Focusing on building a new power system with a gradually increasing proportion of new energy.

#### System

#### **Joint Pollution Control and Carbon Reduction**

Exploring new principles, technologies and models for pollution reduction and carbon reduction synergy and efficiency in the environmental field.

#### **Climate Change and Carbon Neutrality Strategy**

Conducting research on strategic ideas and pathways to address climate change and carbon neutrality.

# **Research Areas**

### **Zero Carbon Building**

**Energy Utilization** 

Focusing on solve the key basic scientific issues and major engineering problems in the field of building to achieve carbon neutrality

#### **Zero Carbon Transportation**

Devoting to realize the wide application of new energy power technology in land, sea and air transportation.

#### **Industrial Deep Decarbonisation**

Conducting research on the scientific basis, key technologies, assessment methods and system integration of deep industrial emission reduction.

#### Governance

#### Climate Governance and Carbon Finance

Focusing on the establishment of national and global climate governance systems and mechanisms for carbon neutrality and conducting carbon finance research.

