# 2021 Annual Report



Innovation Center for Energy

and Transportation



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# Letter from the Executive Director

Dear Friends,

In the past year, the world has gradually shaken off the influences of COVID-19, the United Nations Framework Convention on Climate Change (UNFCCC) successfully held its COP26 in Glasgow, UK, and China's carbon peak and carbon neutrality commitments (the Dual Carbon Goal) have entered a full launch period. Since *i*CET's establishment in 2006, we have been persistent in growing our influence, expanding our boundaries for innovative methods, and continuing to promote, support, and implement low-carbon and climate-friendly policies to reduce global dependence on fossil fuels and greenhouse gas emissions. Since 2006, despite facing many severe challenges, the world has witnessed the increasing deployment of large-scale renewable energy, the proliferation of electric vehicles, and the steady transition to clean energy. I am immensely proud of the active participation and contribution from myself and all *i*CET staff.

I am pleased to see that, in the past year, *i*CET has continued to carry out a number of programs in clean energy and transportation: In collaboration with the Energy Foundation and other partner institutions, the China Clean Transportation Partnership Program has been further strengthened; In cooperations with UK's China Low Carbon Project and the International Children's Investment Fund, we carried out a project to develop comprehensive electrification and carbon neutrality roadmaps in the Greater Bay Area; In collaboration with the Asian Development Bank, we completed a project on market and financing innovations to promote climate-friendly cooling technologies; In partnership with the U.S. Department of Commerce's International Trade Agency, we launched a project focusing on China's decarbonization market and China-U.S. cooperation in climate technology; With support from the Energy Foundation, we conducted a research on the electrification of commercial vehicles; and in cooperation with the Hewlett Foundation, we initiated the Global City Clusters Carbon Footprint Project. We also participated in COP 26 in Glasgow and held a press conference to announce our partnership with USDOC to promote climate-friendly technologies and solutions in China's Greater Bay Area. These achievements reflect our values in action: independence, practicality, and innovation.

Looking ahead, we need to redouble our efforts to help the world and China leap into the new era of zero-carbon development. iCET will continue to promote clean transportation and energy transition projects to accelerate the transition to a net-zero future through standards, policies, technologies, and consumer engagement. At the same time, iCET will continue to promote the carbon MRV mechanism, using the Measurable, Reportable, and Verifiable approach and green financing mechanism to assist the development of implementable roadmaps for advancing the carbon peak and carbon neutrality goals. iCET will also promote the Global Climate Technology Innovation Partnership Project, building a climatefriendly technology multilateral platform to collaborate on innovative solutions for China and North America, Europe, Israel, and other global regions.

There is still a lot of work to be done in the future, and we will continue to rely on your support to fulfill iCET's mission — to create a cleaner world. Although facing challenges, we firmly believe that solutions can always be found and put into action.

My sincerest gratitude again for your attention and support!

Dr. Feng An

Fenga

Founder and Executive Director

# About Us

#### **Our Vision: Creating a Cleaner World**

The Innovation Center for Energy and Transportation (*i*CET) is an independent, non-profit professional organization registered in Beijing and California. It is a leading think tank in the fields of clean transportation, energy transition, and climate change. *i*CET's core mission is to provide governments, enterprises, and the public with innovative solutions to create a clean and low-carbon ecosystem.

## *i*CET's Core Advantages: Independence \* Practicality \* Innovation

For nearly two decades, iCET has established a good reputation as a third-party independent think tank. We are deeply aware of the severity of climate change and have therefore been dedicated to seeking pragmatic, feasible solutions. We adhere to the principle of innovation, commit to scientific research, and guarantee the objectivity and practicality of our results. We focus on promoting technological and policy change, pragmatically driven in actively establishing cooperative partnerships, and advocating green lifestyles and sustainable development models, to cherish our one and only Earth.

### iCET's Core Projects

Currently, *i*CET's work centers around three core projects: the Clean Transportation Transformation Project (CTTP), which accelerates the transition of road transportation to zero-emissions and electrification through standardization, policy, technology, and consumer engagement; the regional Carbon Footprint Management Project (CFMP), which promotes the MRV (measurable, reportable, verifiable) mechanism and management system and effectively tracks the implementation of regional dual-carbon goals (carbon peak and carbon neutrality) through the assessment and prediction of regional and urban agglomeration's greenhouse gas emissions and carbon footprints; and the Clean Tech Innovation and Corporation Program (CTICP), which builds a multilateral cooperation platform for promoting climate-friendly technology between China and North America, Europe, Israel, and other regions.



#### *i*CET's Innovative Approach

*i*CET adopts innovative approaches to fulfill its mission: improved policy design through data-driven analysis, multi-stakeholder engagement towards the formation of a shared vision, and solid, scientific analysis of localized sustainability impact assessments. We are dedicated to conducting cutting-edge research, hosting expert panel discussions, designing assessment tools, developing consumer infotainment applications, and creating new inroads for public outreach.

	The inception of <i>i</i> CET in Beijing, China, Establishing China's first green car online ranking system: Green Car China	2006
	Building China's first online climate registry system: China Climate Registry	2008
Achievements	Initiating and introducing California's ZEV credits program in China	2013
	Launching the "big data and sustainable transportation" initiative in COP21 Paris	2015
	Supporting China's NEV-CAFE joint implementation regulations	<b>2017</b>
	Conducting a study on China's timetable for phasing out traditional ICE vehicles, which received attention and response from MIT and other associated institutions	2019
	Establishing a user-friendly electric commercial vehicle evaluation platform: BestECV	<b>2021</b>

2004	Supporting the development of China's first world- class national fuel economy standards for vehicles (Dr. An Feng's work prior to the official establishment of <i>i</i> CET)
2007	Supporting the development of China's first sustainable biofuel standards
2009	lintroducing California's climate change legislation AB32 into China
2014	Establishing an international cleantech cooperation program: U.SChina Cleantech Center (UCCTC)
2016	Establishing China's first EV crowd evaluation system: BestEV
2018	Publishing China's first "Timetable for Phasing Out Traditional ICE Vehicles" report
2020	Publishing "100 Questions and Answers about NEVs"



- 01 Series of research on road transportation carbon emission reduction policy
- 02 Electric commercial vehicle BestECV project
- 03 China Clean Transportation Partnership, CCTP
- 04 Research on roadmap and implementation
  - plan for zero-emission transportation in China's
  - **Guangdong Province and Greater Bay Area**
- 05 Research on developing a climate-friendly
- cooling sector through market and financing
  - innovations

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# Series of research on road transportation carbon emission reduction policy

# Series of research on road transportation carbon emission reduction policy

Supported by Energy Foundation, Rockefeller Brothers Fund, Natural Resources Defense Council

## **I Research on passenger** vehicle CAFC-NEV

#### Credits

Paid close attention to the policy and implementation effect of passenger vehicle CAFC-NEV Credits, and built a professional and authoritative research platform in the CAFC-NEV Credit field.

## **II Research on energy** saving and electrification of commercial vehicles

Establishing a scenario for the development of China's commercial vehicle electrification based on the 30/60 dual carbon pledge and through case studies on the time node and path for the commercial fleet to achieve carbon peak and terminal zeroemissions.

III Introduction of **California's Low Carbon Fuel Standard (LCFS)** Conduct feasibility studies on introducing California's LCFS to China.

![](_page_10_Picture_0.jpeg)

# I. Research on policy and implementation of passenger vehicle CAFC-NEV Credits

- in passenger vehicles
- Continued to analyze and summarize the CAFC-NEV Credits performance of each passenger vehicle company and vehicle models of different countries
- Analyzed real-word data and future trends and policies of the CAFC-NEV Credit system
- Put forward suggestions on future design of CAFC-NEV Credits policies

The CAFC-NEV Credits policy is one of the original policies with Chinese characteristics in the aspect of energy-saving and new energy development of passenger vehicles in China, and it is an important measure for passenger vehicles to realize energy saving and consumption reduction and overall electrification. Although the policy has been implemented for more than two years, there is still room for improvement. Continuous attention to and analysis of CAFC-NEV Credits policy and its implementation effect is conducive to a better understanding of the policy, the establishment of an authoritative database, the guidance of diversified and multi-level analysis and research, and the acceleration of lowcarbon and electrification of the passenger vehicle industry.

Focused on the development of domestic and foreign fuel economy standards and policies

Tracked hot spots and made in-depth comments on passenger vehicle CAFC-NEV Credits

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# II. Study the commercial vehicle market and overall electrification of commercial vehicles

Commercial vehicles are an important emission source of air pollutants, such as greenhouse gases and nitrogen oxides, and the abundance of commercial vehicle models juxtaposes the urgency of their electrification with the major challenges that such transformation faces.

- Sorted out the current development status of domestic and foreign commercial vehicle electrification
- Analyzed China' s commercial vehicle market and the development of energy-saving technologies
- Researched the current situation and trend of China's commercial vehicle electrification
- Established models to account for commercial energy consumption and carbon emission
- Constructed development pathways for China's commercial vehicle electrification and assessed its environmental benefits
- Made suggestions on China's commercial vehicle overall electrification plan and path

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# III. Conduct in-depth Analysis and feasibility studies on introducing California's LCFS to China

- The transportation sector is a major carbon emitter, making it difficult and costly to decarbonize
- low-carbon fuels
- of great significance China's continuous decarbonization of transportation

Step 1: Carry out in-depth interpretation of California's LCFS Step 2: Sort out current status quos and problems of low-carbon fuel development in China Step 3: Explore key issues on China's introduction of California's LCFS Step 4: Advise on the introduction, design, and implementation of similar regulations in China

The dual carbon pledge requires transportation fuels to be multi-sourced and low-carbon Developed countries and regions recognize and actively promote the development of

China's transportation energy consumption structure is homogenous, low-carbon fuels are

# 02 Best electric commercial vehicle: BestECV

# I. Best electric commercial vehicle: BestECV

In order to better promote the implementation of commercial vehicle electrification, iCET launched the BestECV project to comprehensively and systematically sort out the development prospects and paths of electric commercial vehicles, including models, consumer markets, application scenarios, consumer usage, management, etc. It will establish a comprehensive, user-friendly online evaluation system of ECVs, BestECVs<sup>TM</sup>, to assist in promoting the full electrification of commercial vehicles in priority areas.

![](_page_14_Figure_2.jpeg)

- Establish ECV priority promotion methodology and evaluation system

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Promote and disseminate ECV purchases

# **II. Goal and Influence**

Group standardization

Operation subsidies

Infrastructure layout

> Green freight demonstration <u>citi</u>es/regions

> > Multimodel transport

Decision-making oriented, providing feedback on the problems, solutions, and policy suggestions of the implementation of commercial vehicle electrification. Operations/ Cargo-owner oriented, providing solutions for vehicle electrification in different scenarios and collecting data on actual issues.

Original equipment manufacturer (OEM) oriented, providing development trends for future electric vehicle models.

**Right** of

way policy

Customized products

Model research and development

#### Autonomous carbon trading

Payback period

> Carbon reduction benefits

Corporate carbon neutrality pathway

![](_page_16_Picture_0.jpeg)

# China Clean Transportation Partnership

Supported by Energy Foundation

## I Quarterly thematic seminar

To explore the development trend of clean transportation and controversial hot topics, objectively express decision-making advice and constructive views, and promote multidimensional exchanges and cooperation in various fields.

### **II Expert opinions**

Based on the seminars and recent hot topics, senior experts in the industry are invited to share cuttingedge views, track the development status of hot topics, and put forward policy suggestions on the existing problems

## Partnership projects

Break down information barriers between industries, departments, countries and localities, and organizations of different natures. The achievements of partner organizations are encouraged to be summarized and shared on the platform to expand their influence.

## **IV Newsletter**

Send out newsletters to partner organizations and affiliates to publicize CCTP's activities/events, experts' core opinions, policy suggestions, and research achievements.

# CCTP's influence in 2021

Supported by Energy Foundation

organizations, 230+ experts participated in the activities/events hosted by CCTP

In-depth discussions on 30+ relevant topics on clean 2 transportation

25,000+ views on WeChat official account

3

4

5

Create video account and posted 8 videos with 5500+ views

Collaborate with 20+ mainstream media outlets, 32,000+ views on live-streamed virtual annual gala

![](_page_19_Picture_0.jpeg)

Research on roadmap and implementation plan for the zero-emissions transportation in China's Guangdong Province and Greater Bay Area

# Research on roadmap and implementation plan for the zeroemissions transportation in China's Guangdong Province and Greater Bay Area

Since 2020, *i*CET has joined forces with a number of top think tanks, universities, and scientific research institutions to carry out research on the roadmap and implementation plan for the zero-emissions transportation in China's Guangdong Province and Greater Bay Area, focusing on the Guangdong Province and the Guangdong-Hong Kong-Macao Greater Bay Area, aiming to accelerate the process of transportation carbon neutrality, to focus on relevant research ad policy recommendations in Guangdong province, and to promote the coordination and linkage between Hong Kong, Macao, and Guangdong.

2020/2021: 15th Five-Year Policy Recommendations for the Comprehensive Electrification of Road Traffic in Guangdong Province  $\sqrt{}$ 

2021/2023: Research on roadmap and implementation plan for the zero-emissions transportation in China's Guangdong Province and Greater Bay Area 🛠

Phase 1: focus on road traffic in Guangdong Province☆ Phase 2: focus on non-road transport, focus on the Greater Bay Area

# Research on roadmap and implementation plan for the zeroemissions transportation in China's Guangdong Province and **Greater Bay Area**

Focus on Guangdong Province and the Greater Bay Area, expand the scope of research to the whole transportation field, including road and non-road traffic (i.e. water transportation, railway, aviation, etc.), based on the key time node of 2050/2060, to construct a comprehensive "Research on roadmap and implementation plan for the zero-emissions transportation in China's Guangdong Province and Greater Bay Area". Through setting more ambitious targets, conducting pilot demonstration projects, and developing a feasible roadmap and action plan, *i*CET hopes to lead China to realize carbon peak and carbon neutrality goals.

Develop a zero emissions

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![](_page_21_Picture_4.jpeg)

tiered, phased, disaggregated roadmap for net-

Build an accounting model for all transportation emissions in Guangdong Province and the Greater Bay Area

Establish year-by-year road traffic carbon budgets for major regions and cities

![](_page_22_Picture_0.jpeg)

# Research on developing a climate-friendly cooling sector through market and financing innovations

# Research on developing a climate-friendly coolingsector through market and financing innovations

Supported by Asian Development Bank -

#### **Background:**

China's electricity consumption for refrigeration accounts for more than 15% of the total, with an average annual growth rate of nearly 20%.

The electricity load of air conditioning in big and medium-sized cities accounts for about 60% of the peak load in summer, and the energy-saving capacity of main refrigeration products reaches 30-50%.

HFCs are the main refrigerant to replace CFCs, but GWP can reach thousands of times greater than CO2 and could contribute 20% of global GHG emissions by 2050 if no corresponding measures are taken.

China has taken an active part in international initiatives in the field of green refrigeration. This year, a green refrigeration action plan jointly formulated by seven ministries and commissions was issued.

#### **Overall goal:**

Assist Ningbo to design a climate-friendly and efficient refrigeration scheme at the city level to achieve greenhouse gas emission reduction and energy efficiency improvement in the refrigeration sector in various sectors.

#### Project content:

Assess global and Chinese refrigeration-related policies and identify policy gaps; <u>Evaluate refrigeration-related technology and equipment;</u>

Design innovative business models and financing mechanisms to support the implementation of large-scale green refrigeration solutions in Ningbo;

2 prototype designs for Internet + refrigeration application.

# **Urban Green Cooling Action Plan**

![](_page_24_Figure_1.jpeg)

# Annual Activity Review

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Speeches

# **01** Main Achievements

# 02 Research Reports

# **03** Selected Events and Keynote

# 2021 Main Achievements

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# Continue to deepen the field of energy-saving and emission reduction for passenger and commercial vehicles

*i*CET has been tracking the management and implementation of China's passenger vehicle fuel consumption standards and the development of new energy vehicles for more than ten years. In October 2021, *i*CET released the "2021 China Passenger Car Dual Points Research Report." Based on the accounting data of fuel consumption and new energy vehicle points since the four stages, it quantitatively analyzed the realization degree and implementation challenges of the two sets of points management goals, and made policy recommendations based on the research results. In the field of commercial vehicles, *i*CET analyzed the development status of electrification of commercial vehicles in China and the challenges to achieving the "dual carbon" goal based on the insurance database of commercial vehicles in the past five years, and actively conducted in-depth discussions with industry experts during the research period. Communication, and put forward opinions and suggestions for the Chinese commercial team to accelerate the realization of carbon peaking and net zero-emission goals.

# In-depth Analysis of California's Low-Carbon Fuel Standards, actively introducing international advanced experience, and promoting policy research and formulation

In 2021, based on the in-depth interpretation of the latest revised "Low-Carbon Fuel Standard (2.0)" in California, *i*CET, combined with the development status of China's low-carbon fuel, offered an analysis of the current status of low-carbon fuel policy in China. *i*CET then released the report "Interpretation of California's <Low-Carbon Fuel Standard> and Feasibility Study in China". At this stage, China's transportation energy consumption structure is relatively simple, and the "dual carbon" goal has posed a major challenge to the energy conservation and emission reduction of the transportation industry. In order to continuously reduce carbon emissions in transportation, developed countries and regions such as Europe and the United States generally recognize and actively promote the development of low-carbon fuels, while China's policies in this field are lacking. *i*CET is the first institution in China to introduce and interpret the California low-carbon fuel standard series. The project results have been widely recognized and cited by the industry, providing a basis for promoting China to formulate similar policies.

# 2021 Main Achievements

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# The electric vehicle evaluation project was further extended and expanded to create a user-friendly electric vehicle consulting platform BestECV<sup>TM</sup>

Due to the complexity of multiple vehicle models, commercial vehicles are very difficult to electrify. The electrification process of commercial vehicles obviously lags behind that of passenger vehicles and is only used in certain specific scenarios. Specifically, the medium and heavy-duty truck segments are still in the exploratory stage. The firm goal of zero-emission transformation in transportation poses a huge challenge to the current commercial market where the development of new energy vehicles is extremely unbalanced. In this context, *i*CET launched the BestECV project. By establishing a complete set of user-friendly electric commercial vehicles and providing details from the perspectives of type parameters, applicable scenarios, cost benefits, environmental benefits, application cases, etc., BestECV analyzes the feasibility of commercial energy commercial energy and systematically sorting out the application status, development prospects and paths of commercial electric vehicles, so as to better promote the implementation of the process of commercial electric vehicles. As a continuation of the commercial low-carbon development research and BestEV project, the BestECV project will focus on new energy commercial vehicles, and promote the commercial sector to achieve the "dual carbon" goal as soon as possible through a bottom-up approach.

## The regional focus on clean transportation transformation

The task of zero-emission transformation of transportation is arduous, and it is of great significance for developed regions to take the lead. In 2021, *i*CET will launch the "Research on the Net-Zero Carbon Emissions Roadmap for Transportation in Guangdong Province and the Guangdong-Hong Kong-Macao Greater Bay Area", which will further focus on the research related to the clean transition of transportation to the regional level. The Guangdong-Hong Kong-Macao Greater Bay Area is the fourth largest bay area in the world. Its economic development is at the forefront of China, with a relatively high degree of social openness and relatively active policy formulation. Net-Zero Carbon Emissions Roadmap". Lead China towards peaking carbon and net-zero emissions by setting more aggressive targets, conducting pilot demonstration projects, and developing an implementable roadmap and action plan.

# 2021 Main Achievements

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### China Clean Transportation Partnership (CCTP) continues to focus on policy and technological innovation to further promote energy conservation and emission reduction in the transportation industry

In the past year, the China Clean Transportation Partnership (CCTP) has organized four salons centering around industry priorities and hot issues and successfully held the CCTP Annual Conference and the Transportation Carbon Peak and Carbon Neutrality Goals, Paths and Countermeasures Forum. In 2021, more than 100 experts, scholars, and industry practitioners participated in the CCTP thematic salons and annual forum, and conducted in-depth discussions on more than 30 related topics, including the development of hydrogen fuel cell vehicles, the impact of the two-carbon goal on bulk products transportation, carbon accounting boundaries and methodologies in the transportation sector, and next-generation infrastructure. In addition, in 2021, the Secretariat compiled and published nearly 100 articles on China's clean transportation work briefings, expert opinions, partner workshops, and policy briefs. At the same time, two new industry organizations joined CCTP in 2021, bringing the number of partner members to 24. With the joint support of the Steering Committee and Executive Committee, the active participation of partnership members and institutions concerned with clean transportation development, and the efforts of the Secretariat, CCTP has played an active role in promoting energy conservation and emission reduction in China's transportation industry.

### "Analysis of California Low Carbon Fuel Standards and China Feasibility Study"

The proposal of the "30/60 dual-carbon" goal poses a serious challenge to the carbon reduction process in the transportation sector. Comprehensive electrification is an important means and direction for carbon emission reduction in transportation, but electrification in the fields of heavy trucks, aviation, and water transportation is difficult. Hence, the use of renewable fuels and other fuels with lower life cycle carbon intensity is still of great significance to continuously reduce transportation carbon emissions. California, United States, has a relatively successful experience in using low-carbon transportation fuels. The report comprehensively interprets California's revised 2018 version Low-Carbon Fuel Standards (2.0) and discusses the formulation and implementation of similar policies based on the basic status quo in China, feasibility analysis, and put forward corresponding policy recommendations.

### "2021 China Passenger Car Dual Credit Research Report"

Since the implementation of the "Dual Credits Policy", it has played an important role in promoting energy-saving passenger cars and new energy vehicles. 2020 is the final year of the fourth stage of passenger vehicle fuel consumption limit management and the first stage of the "Dual Credits Policy". The report analyzes and summarizes the implementation effects of the Dual Credits Policy at this stage and discusses the difficulty of achieving this goal in the next stage. Based on the above research results, the report puts forward targeted policy recommendations for the future design and development of the Dual Credit Policy.

加州低碳燃料标准解读 及中国可行性研究报告

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#### 2021 中国乘用车双积分研究报告

# Main Research Reports

2021

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### "Research Report on the Development of Commercial Vehicle Electrification in China"

With China's goal of "carbon peaking by 2030 and carbon neutrality by 2060", various industries are actively formulating the path and timetable for the realization of the "dual carbon" goal. Greenhouse gas emissions from commercial vehicles account for about 6-7% of the total domestic terminal emissions, and its carbon reduction process is of great significance to the realization of the "dual carbon" goal. This research systematically sorts out the current status and development potential of China's commercial vehicle electrification and discusses the time node and path for commercial vehicles to achieve peak carbon emissions and terminal net-zero emissions through scenario analysis. Based on this research. The report then proposed policy recommendations for carbon development.

### "Development of Green Cooling Industry Through Market and Financing Mechanism Innovation"

By reviewing domestic and foreign policies and regulations on improving energy efficiency and reducing greenhouse gas emissions in the refrigeration industry, the report evaluates a series of refrigeration-related technologies and technical solutions and analyzes various international financing tools and business models for Ningbo's reference. The report aims to introduce feasible business models and innovative financing mechanisms, use Internet technology to optimize the utilization efficiency of refrigeration resources, create an "Internet + refrigeration" model to achieve large-scale deployment of green refrigeration solutions, and help Ningbo refrigeration department improve energy efficiency and reduce carbon emissions. 加州低碳燃料标准解读 及中国可行性研究报告

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#### 2021 中国乘用车双积分研究报告

# 2021 Main Research Reports

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### "Roadmap and Implementation Plan for Comprehensive Electrification of Transportation in China's Greater Bay Area" Project

This project is supported by the "UK Government China Prosperity Fund: China's Energy and Low-Carbon Economy Project", jointly initiated by *i*CET and six top think tanks, universities, and research institutions in China and the UK. This project focuses on Guangdong Province and the Guangdong-Hong Kong-Macao Greater Bay Area and formulates a roadmap and implementation plan for the comprehensive electrification of road traffic, aiming to accelerate the process of comprehensive electrification of road traffic, aiming to accelerate the process of comprehensive electrification of road traffic in the Greater Bay Area. Key areas of focus include passenger vehicle electrification, commercial vehicle electrification, charging infrastructure construction and grid integration, hydrogen energy and fuel cell development, and smart low-carbon city planning. This project will draw on international experience in advanced policy design and target formulation, combined with local characteristics, to support the formulation of the "14th Five-Year Plan" road transportation electrification policy in Guangdong Province, propose a proposed technical roadmap and implementation plan, and formulate a 2035 roadmap for the electrification of road transportation for the Greater Bay Area.

#### Series of reports

"14th Five-Year Policy Recommendations for Guangdong Province Road Traffic Electrification" "Guangdong Province and the Greater Bay Area Charging Infrastructure Construction Roadmap Research" "Guangdong Province and the Greater Bay Area Commercial Electrification Roadmap Research" "14th Five-Year Policy Recommendations for the Electrification of Guangdong Province Passenger Vehicle"

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2021 Main Research Reports

# **2021 Selected Events and Keynote Speeches**

#### 2021 China Commercial Carbon Neutrality Seminar (April 2021 Beijing)

On April 27, the "2021 China Commercial Vehicle Carbon Neutrality Seminar and China Commercial Vehicle Industry Research Association Working Conference" was held in Beijing. Dr. Feng An, Executive Director of the Innovation Center for Energy and Transportation (iCET), was invited to attend the conference and delivered a keynote speech entitled "International Experience in Realizing the Goal of Carbon Neutrality in Commercial Vehicles", sharing the technical paths and related technologies for achieving carbon neutrality in international commercial vehicles policy instruments.

#### China Clean Transportation Partnership 2021 Annual Conference & "Transportation Carbon Peak and Carbon Neutrality Goals, Paths and Countermeasures Forum" (May 2021, Beijing)

On May 27, the China Clean Transportation Partnership 2021 Annual Meeting — "Transportation Carbon Peak and Carbon Neutrality Goals, Paths and Countermeasures Forum" was successfully held in Beijing. About 120 people from universities, research institutes, international institutions, think tanks, enterprises, and media attended the in-person conference, and the live broadcast on Weibo reached 33,000 people. The meeting was chaired and summarized by Gong Huiming, Senior Project Director of the Energy Foundation Transportation Project.

#### UN-Energy High-level Dialogue and Joint World Ministers' Meeting (Online, June 2021)

From June 21st to 25th, the UN-Energy High-level Dialogue and World Ministers' Joint Meeting was held online. Dr. Feng An, Executive Director of the Innovation Center for Energy and Transportation (*i*CET), was invited to attend the conference and participated as a guest speaker in two sub-forums of "City Energy Technology Innovation" and "Leaders Dialogue". The conference convened ministers in the field of energy and environment from all over the world, as well as leaders and major stakeholders such as cities, enterprises, professional institutions, etc., to focus on energy acquisition and use, realization of inclusiveness and equity of sustainable development goals, innovative technology and data usage, energy transition, and energy finance and investment.

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DR. ANGELA WILKINSON SECRETARY- GENERAL AND CEO

# **2021 Selected Events and Keynote Speeches**

### "Zero Carbon Future and Personal Behavior Change" Seminar Series (September 2021, Beijing)

On September 17th, a series of seminars on "Zero-Carbon Future and Personal Behavior Change" was held in Beijing to present relevant information and cutting-edge progress in promoting the transformation of personal green and lowcarbon behavior from domestic and foreign research policies, advocacy practices, etc., and to facilitate communication and collaboration among participants. Ms. Wang Wenwen, Senior Manager of the Clean Transportation Project of Innovation Center for Energy and Transportation (iCET), was invited to attend the conference and delivered a keynote speech entitled "How to Promote Consumers' Objective Understanding and Acceptance of New Energy Vehicles".

#### United Nations Climate Change Conference COP26 (October 2021, Glasgow, UK)

From October 31st to November 12th, the 26th United Nations Climate Change Conference (COP26) was held in Glasgow, Scotland, UK. At this UK COP26 conference, *i*CET and representatives of various stakeholders from global governments, non-profit organizations, enterprises, etc. who are concerned about sustainable development conducted extensive and in-depth discussions and exchanged information on how to better solve global climate change and zero-carbon development issues.

#### **UK-South China Climate Change Conference Side Event - Zero Carbon Emissions** Transportation Sub-forum (October 2021, Guangzhou)

On October 28th, the Innovation Center for Energy and Transportation (iCET) and the British Consulate General in Guangzhou jointly held a side event of the "UK-South China Climate Change Conference" - a sub-forum on zero-carbon transportation. In order to further deepen the cooperation between the UK and South China, accelerate the process of moving towards zero emissions in the field of transportation to cope with climate change, and focus on the business cooperation experience of Guangdong and the UK in the fields of clean energy construction, low-carbon transportation, and low-carbon technology development.

#### The 11th COTA-World Bank China Transport Forum (December 2021, Xi'an)

The 11th COTA-World Bank China Transport Forum was held in Xi'an on December 18. The theme of this forum is "The Road to 2060" and will focus on real-world experiences and pilot practices in China and around the world. Decarbonize transportation. Ms. Wang Wenwen, Senior Manager of Clean Transportation Project of Innovation Center for Energy and Transportation (iCET), was invited to attend the conference and delivered a keynote speech entitled "Research on Road Traffic Electrification Path of Guangdong-Hong Kong-Macao Greater Bay Area".

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# iCET Team

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Dr. An Feng Founder and Executive Director

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Emma Wang Senior Project Manager

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Rainning Bao Senior Project Manager

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Lanzhi Qin Project Manager

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Jing Luo Project Officer

![](_page_34_Picture_11.jpeg)

Ran Zhang Communication Officer

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Dr. Green-Weiskel Senior Consultant on Climate Change Program

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Heng Wang Project Officer

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#### Li Chen Administration Officer

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Dr. Maya Ben Dror Senior Consultant on Clean Transportation Program

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Shenwei Liang Project Analyst

![](_page_34_Picture_23.jpeg)

Alex Morales Consultant on Clean Technology Program

# **Board of Directors and Advisors**

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Dr. Binlin Gu Academician of the Chinese Academy of Sciences, Director of Institute of Advanced at Columbia University's Study at Tsinghua University, Former President of Tsinghua University

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David B. Sandalow Former Under Secretary at the U.S.DOE, Inaugural Fellow California Environmental Center on Global Energy Policy

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Linda S. Adams Former Secretary at the Protection Agency, Founding partner at Clean Tech Advocates

![](_page_35_Picture_7.jpeg)

Dr. Kebin He Dean of School of Environment Executive Director of iCET, at Tsinghua University, Academician of the Chinese **Engineering Academy** 

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Dr. Feng An

![](_page_35_Picture_11.jpeg)

#### Junfeng Li

Former Director-General of Climate Change Strategy at California Energy Commission, Policy and Technology LLC, the National Development and Reform Commission of China

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#### Jim D. Boyd Former Commissioner at the

Former President at the California Air Resources Board the Climate Works

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Dr. Dadi Zhou Vice President at the China Energy Director of Climate and Research Association, Chairman at the Energy Economics International Council on Professional Committee

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Dr. Daniel Sperling Acting Director of Energy Efficiency Center and Founding Director of Institute of Transportation Studies at UC Davis Foundation

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Dr. John DeCicco Research Professor at the University of Michigan Energy Institute

CEO of Energy Innovation: Founder and former CEO at

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Katherine Blumberg Health Programs at the Clean Transportation

Visiting Scientist at the Lawrence Berkeley National Laboratory

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![](_page_35_Picture_29.jpeg)

Dr. Fuqiang Yang Distinguished Researcher at Peking University Energy Research Institute, Former Vice Chairman at Energy

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Elizabeth Economy Director of Asia Studies at the Council on Foreign Relations

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Barbara Finamore Former Director at the National Natural Resources Council China Program, Senior Lawyer

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