



2024国际氢能与燃料电池汽车大会暨展览会

International Hydrogen and Fuel Cell Vehicle Congress & Exhibition 2024



2024年6月4-6日
June 4-6, 2024



上海汽车会展中心
Shanghai Automobile Exhibition Center

Post Show Report

www.fcvc.org.cn



CONTENTS

01

Event Overview

03

Exhibition Review

05

Marketing and Media

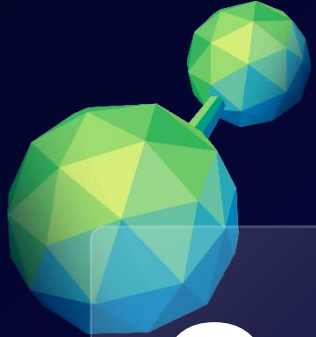
02

Conference Review

04

Concurrent Events





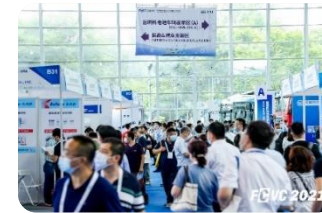
01

Event Overview



/01 Event Overview-Past Review

FEVC 2024



**November 7-8,
2016
Beijing**

1 plenary session
4 forums
1 working group meeting
500 delegates

**November 7-8,
2017
Rugao, Jiangsu**

1 plenary session
4 forums
1 working group meeting
16 exhibitors
1,100 delegates

**October 23-25,
2018
Rugao, Jiangsu**

1 plenary session
1 leadership forum
5 forums
1,500 delegates
52 exhibitors
6,000m² exhibition area
2,626 professional visitors

**September 26-28,
2019
Rugao, Jiangsu**

1 plenary session
6 forums
5 side events
1,500 delegates
111 exhibitors
10,000m² exhibition area
4,233 professional visitors

**September 14-16,
2020
Jiading, Shanghai**

1 plenary session
4 forums
1,000 delegates
127 exhibitors
10,000m² exhibition area
5,567 professional visitors

**June 8-10,
2021
Jiading, Shanghai**

1 plenary session
8 forums
2 side events
1,100 delegates
228 exhibitors
14,000m² exhibition area
7,358 professional visitors

**July 5-7,
2023
Jiading, Shanghai**

1 plenary session
8 forums
3 closed-door summits
1,200+ delegates
300+ exhibitors
20,000m² exhibition area
9,643 professional visitors

/01 Event Overview- 2024 Past Review

FCVC 2024

International Hydrogen and Fuel Cell Vehicle Congress & Exhibition 2024 (FCVC 2024) was held during **June 4-6, 2024** in Shanghai Automobile Exhibition Center. The topic of FCVC 2024 was **"Strive for Innovation, Hydrogen Powers Future, Firmly Promoting the High-Quality Development of Hydrogen Energy and Fuel Cell Vehicles,"** consisted of "1 Plenary Sessions, 7 thematic sub-forums, and 5 concurrent sessions." Alongside the event, a technical exhibition with an area of 25,000 m2 showcased 302 domestic and international enterprises and brands. Additionally, numerous exciting activities, including technical speeches, new product launches, technical tours, and science popularization events, were held concurrently. **The FCVC conference and exhibition established an authoritative and professional international cooperation and exchange platform for the industry, jointly promoting the integrated development of hydrogen energy and fuel cell vehicle technologies to achieve industrial win-win results.**

Hosts

- China Society of Automotive Engineers
- International Hydrogen Fuel Cell Association

Guided by

- Administration of Jiading District, Shanghai

Organizer

- Anting-Shanghai International Automobile City

Special Thanks

- Anglo American plc



1 Plenary Session
1,000+ Delegates



7 Thematic Sub-forums
5 Concurrent Sessions



2 Concurrent visits
Multiple High-level meetings



25,000m² Exhibition area
302 Exhibitors



1.2w+ Professional visitors
3.5w+ Visits



20+ Technical Theaters
10+ Launch/signing and other events



2.6 million Live views
12 On-site interviews



60+ Media partners
90+ Attending journalists

/01 Event Overview-2024 Sponsors

FEVC 2024

Special Thanks



Gold Partners



Silver Partners

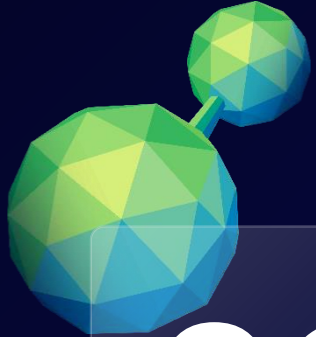


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Bag Sponsor





02

Conference Review



/02 Conference Review-Meeting Overview

FCVC 2024



Strive for Innovation, Hydrogen Powers Future, Firmly Promoting the High-Quality Development of Hydrogen Energy and Fuel Cell Vehicles

June
4

- Summit 1: Technological Breakthroughs in Fuel Cell Systems and Core Components
- Summit 2: Innovative Applications of Low-carbon Hydrogen Production and Hydrogen Energy Storage Technologies
- Summit 3: Diversified Innovative Practices in Hydrogen Energy Storage, Transportation and Infrastructure
- Summit 7: Industry Trends, Technology Realization Paths and Investment Opportunities in the Hydrogen Parity Era

June
5

- Opening Ceremony
- Keynote Speech: Outlook for New Trends in the Greening of the Global Hydrogen Energy Industry
- Keynote Speech: Plotting a New Chapter in the Promotion of Fuel Cell Vehicles
- Keynote Speech: Exploring New Paths for Synergistic Development of the Whole Industry Chain

June
6

- Summit 4: Exploring New Paths For Commercialized Operation of Fuel Cell Vehicles
- Summit 5: Hydrogen Safety Risk Management, Control and Emergency Response Measures
- Summit 6: Standards, Regulations and Testing Technologies for Hydrogen and Fuel Cell Vehicles



Concurrent Closed-door Meetings

- Close-door Session: The Road to the Hydrogen Parity Era
- Close-door Session: Green Hydrogen Industry Technology Development Symposium
- Close-door Session: Fuel Cell Vehicle Innovation and Development Strategy Exchange in the New Stage
- Side Meeting: The Global Hydrogen Industrial Association Alliance FCVC Summit (GHIAA-FCVC Summit)
- Close-door Session: The Executive Board Meeting of the International Hydrogen Fuel Cell Association

/02 Conference Review-Plenary Session

FCVC 2024

- During the FCVC 2024, **5 academicians, 5 government leaders, 7 representatives of international organizations, and 8 leaders of domestic and foreign enterprises delivered speeches**, indicating a continuous improvement in the level of internationalization compared with previous years.
- Head of the hydrogen energy field from various leading companies such as **SAIC Motor, Hyundai Motor, Daimler Truck, REFIRE Group, FORVIA, Anglo American, LONGi Hydrogen Energy, and Qingdao SunHydro** delivered speeches.

Academicians & Government Leaders	International Organization Representative
ZHANG Xiaoqiang, The Director of the Senior Expert Advisory Committee of CCIEE, Former Vice Chairman of National Development and Reform Commission	Gunther Beger, Managing Director, United Nations Industrial Development Organization (UNIDO)
XU Jing, Director of the National Science and Technology Library, Former Director-General of the Department of Strategy and Planning of the Ministry of Science and Technology	Gauri SINGH, Deputy Director-General, International Renewable Energy Agency (IRENA)
OUYANG Minggao, Academician of Chinese Academy of Sciences (CAS), Professor of Tsinghua University, Chairman of International Hydrogen Fuel Cell Association	Jaehong KIM, Chairman of H2KOREA
WU Zhixin, Deputy General Manager, China Automotive Technology and Research Center (CATARC), Foreign Academician, Russian Academy of Engineering	Jung Ran SUH, Vice President, Korea Automobile & Mobility Association (KAMA)
ZHANG Jiujun, Professor of Fuzhou University, Foreign Academician of the Chinese Academy of Engineering, academician of the Royal Canadian Academy of Sciences, academician of the Canadian Academy of Engineering, academician of the Engineering Institute of Canada	Katerina ALEKSOSKA, General Manager, Australian Hydrogen Council (AHC)
TANG Wenkan, Vice Chairman of Shanghai Municipal Commission of Economy and Informatization.	Khaled NAGEIB, CEO of Hydrogen Egypt
LU Zufang, Jiading District Standing Committee, Executive Deputy District Governor.	Bamidele ADEBISI, Director of African Hydrogen Partnership (AHP)
HAN Dadong, Director of the Smart Manufacturing Promotion Division of the Shanghai Commission of Economy and Informatization	Industry Organizations & University Experts
YE Siyu, Academician of the Canadian Academy of Engineering, Chairman&CTO of Sinohykey Technology Company, Ltd., Professor of Guangzhou University	ZHANG Jinhua, Chairman of China SAE, Standing Vice Chairman of IHFCA
SUN Jinhua, Director, Energy Fire Safety Institute, University of Science and Technology of China	HOU Fushen, Vice Chairman and Secretary General of China SAE
	WANG Ju, Secretary General of International Hydrogen Fuel Cell Association
	YU Zhuoping, Professor of Tongji University, Standing Executive Board of IHFCA

/02 Conference Review-Opening Ceremony

FEVC 2024

On June 5, Zhang Xiaoqiang, Director of the Senior Expert Advisory Committee of CCIEE, Former Vice Chairman of National Development and Reform Commission, addressed the need for advancing high-quality development of the hydrogen energy industry. He highlighted four key efforts for its future.



- Firstly, enhance the innovative capacity of the hydrogen industry and expedite the development of key core technologies.
- Secondly, seize opportunities to accelerate the development of green hydrogen.
- Thirdly, establish high-standard hydrogen infrastructure.
- Fourthly, further refine the policy framework.

Adhere to building an open and advanced economic system, actively engage in international hydrogen cooperation, strengthen collaboration with technologically advanced countries, promote mutual recognition of standards in hydrogen equipment, clean hydrogen trade, and carbon footprint, and actively participate in the formulation of international hydrogen standards."

On June 5th, Gauri SINGH, Deputy Director-General of IRENA, delivered a speech, highlighted that green hydrogen plays a crucial role in advancing global energy transition, decarbonizing industries, driving regional economic growth, and stabilizing employment.



- "According to IRENA's analysis, energy scale is a powerful driver for investment. China has deployed a significant amount of renewable energy over the years, accounting for almost 60% of global steel production. Additionally, ammonia and methanol may represent significant future hydrogen demand and electrolyzer deployment, while large-scale production and competitive labor costs offer opportunities for electrolyzer suppliers from other countries."

Plenary Session: The declining costs driven by clean energy deployment is a major trend in the development of global green hydrogen supply systems. Countries will further explore diverse hydrogen applications and collaborate to improve the global clean energy ecosystem.



OUYANG Minggao

"The next step for the hydrogen energy industry's development should be driven by **low-cost hydrogen production using surplus green electricity resources**, and led by diversified and large-scale commercial demonstration applications, to promote the development of the entire green hydrogen value chain."



Jung Ran SUH

"Korea has adopted a series of policies and regulations, including the Korean Hydrogen Economy Roadmap and the Hydrogen Economy Act, to promote hydrogen infrastructure construction, establish **a global clean hydrogen supply system**, drive the scaled development of fuel cell passenger vehicles, and explore the application of hydrogen in commercial vehicles, rail transit, and shipping."



PIAO Guozhe

"Forming **micro-scale hydrogen energy eco-hubs** on a regional basis to independently construct a hydrogen-based social ecosystem. Hyundai is currently carrying out similar **resource recycling projects**, focusing on users' needs throughout the entire hydrogen production and application chain, and proposing optimal customized solutions."



Benny OEYEN

"Anglo American is actively promoting the successful experience of its projects in other European regions such as Hamburg, Brussels, and Paris, exploring sustainable business models, **building a hydrogen mobility ecosystem**, and promoting the rapid deployment and large-scale development of fuel cell vehicles."



Katerina ALEKSOSKA

"Australia has formulated a series of incentive policies to create a favorable development environment for the hydrogen energy industry. Leveraging its rich **renewable energy resources**, the country is actively exploring the large-scale application of **clean hydrogen in steel, industry, and power sectors**."

Plenary Session: The fuel cell vehicle industry should continuously improve policies and regulations. Its large-scale development requires not only technological innovation and product engineering validation of core components and key materials, but also the strengthening of vehicle infrastructure network construction. In the future, to open up new development paths for fuel cell vehicles, it is necessary to further reduce costs across the entire industry chain, pilot typical vehicle application scenarios, and establish viable business models.

ZHANG Jiujun, Fuzhou University

"Improving the reliability and durability of fuel cells relies on **key technological research and innovations** in membrane electrodes, catalysts, membranes, and carbon paper."



ZU Sijie, SAIC Motor Group

Continuously improve hydrogen energy management, **expedite infrastructure development**, intensify technological cooperation and sharing, promote the industrialization of self-reliant materials, accelerate **hydrogen energy construction**, and streamline the **business model** for hydrogen fuel cell vehicles.



YE Siyu, Guangzhou University

"The bottleneck facing large-scale industrialization of key domestic materials lies in insufficient engineering capabilities. In the future, genuine cooperation between upstream and downstream industries, as well as **strengthened product engineering validation**, is required."



Manfred SCHUCKERT, Daimler Truck AG

The stringent emission legislation in Europe will promote the adoption of zero-emission trucks. Mass production of hydrogen-powered trucks will drive further cost reductions, and **hydrogen refueling infrastructure** is also of great significance."



Louis XU, Faurecia Clean Mobility Division

"Hydrogen fuel cell vehicles are one of the best technological paths for long-distance heavy-duty transportation. Faurecia will continuously improve the **lifespan** and **hydrogen storage capacity** of hydrogen tanks, **driving down costs**."



Robin LIN, REFIRE Group

"China's fuel cell vehicle industry still needs to continuously improve its industrial policies, **explore typical scenarios in depth**, strengthen global industrial chain collaboration, and accelerate the transition of industrial development from **policy-driven to market-driven**."



/02 Conference Review-7 Thematic Summits

FEVC 2024

Significant progress has been made in the innovation and technological advancement of domestic fuel cell core components and key materials. The industry should continue to deepen technological breakthroughs in **high-power-density, high-efficiency, high-reliability, and high-durability fuel cell systems in the future.**

Opportunities and challenges coexist in hydrogen-electricity coupling scenarios, requiring technological innovations to further enhance the **electrolysis efficiency, response speed, current density, and stability** of water electrolysis for hydrogen production, in order to better address the integration and consumption of large-scale renewable energy.

Hydrogen storage and transportation is a weak link in the entire hydrogen energy industry chain. It is necessary to further strengthen research, demonstration, and promotion of **efficient storage and transportation technologies** such as high-pressure gaseous hydrogen, liquid hydrogen, hydrogen transmission pipelines, micro-pipe networks, and hydrogen storage wells to meet the demand for **large-scale, low-cost** hydrogen utilization.

Based on the foundation of fuel cell vehicle demonstration city cluster projects, the current industry is in **an adjustment phase for the promotion** of fuel cell vehicles, mainly focusing on **medium- and short-distance applications**, while long-distance scenarios have not yet been scaled up.

Policy support and theoretical research on hydrogen energy safety need to be strengthened. It is recommended to conduct research on leak-diffusion-explosion full-chain monitoring and warning, inherent safety design, safety protection, and emergency response to **enhance the industry's risk prevention, control, and disposal capabilities.**

China's standardization construction in key areas of the hydrogen energy industry has achieved **initial success**. In the future, it is necessary to **continuously develop diverse core technical standards** and deepen the coordination of standards and regulations to **improve systematic construction.**

Hydrogen energy is expected to become **a trillion-dollar market globally**, and with current policy support, its typical applications, such as in heavy-duty transportation, **have initially become economically viable.**

Core Components

Low-Carbon Hydrogen Production and Storage

Hydrogen Storage, Transportation, and Infrastructure

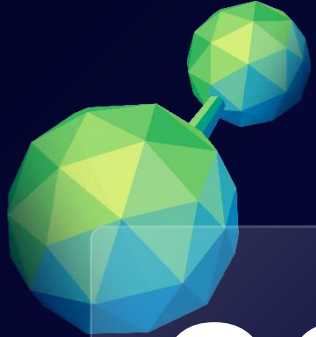
Commercialization of Fuel Cell Vehicles

Hydrogen Safety

Standards, Regulations, and Testing Technologies

Investment and Financing





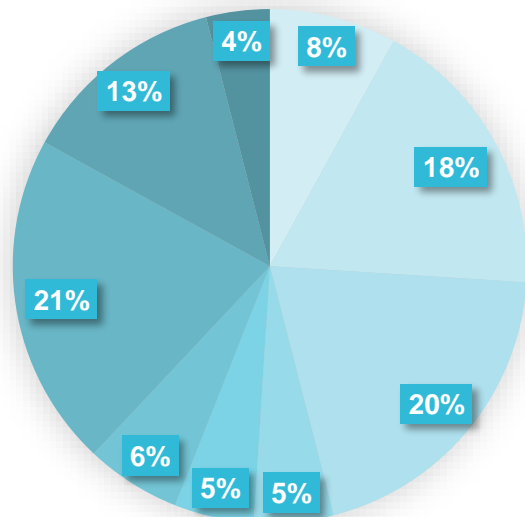
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Exhibition Review



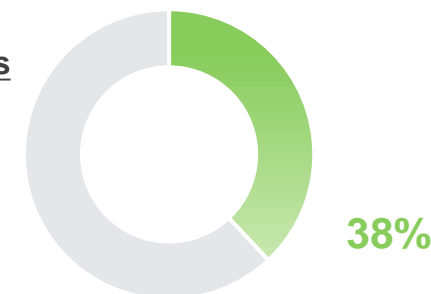
- **Exhibition Highlights:** One of the most professional, largest, and influential commercial technology exhibitions in the industry.
- **Exhibitor Overview:** The exhibition area covers 25,000 m², with 302 exhibitors, a **10%** increase compared to previous year. 114 exhibitors are newcomers, accounting for **38%**. There are 110 foreign enterprises and brands, accounting for **36%**, with overseas pavilions from Canada, Korea, etc., and a joint vehicle display area.
- **Category of Exhibits:** Hydrogen fuel cell vehicles and fuel cell stack systems account for **26%**, while hydrogen production, storage, transportation, and refueling-related products account for **16%**.

Exhibit categories analysis



- Hydrogen fuel cell vehicle and other applications 8%
- Fuel cell systems and stacks 18%
- Fuel cell stack components and raw materials 20%
- Hydrogen production/supply 5%
- Hydrogen storage/transportation 5%
- Hydrogen fueling station and hydrogenation related equipment 6%
- Hydrogen energy related equipment and parts 21%
- Test platforms, systems and equipments, analytical instruments, etc 13%
- Other related supporting services: testing, certification, consulting, etc 4%

Percentage of New Exhibitors



Percentage of Foreign Exhibitors



/03 Exhibition Review-Exhibitors

FEVC 2024

		 The Power of Dreams	How we move you. CREATE • TRANSCEND, AUGMENT		 广汽集团 GAC GROUP 匠于心 品于行 CRAFTED BY THE DRIVEN	 玉柴芯蓝氢能 YUCHAI CYNLAND HYSTECH	 中材科技(苏州)有限公司 Sinochem Science & Technology (Suzhou) Co., Ltd.	 东岳未来氢能 DONG YUE FUTURE HYDROGEN ENERGY	 国氢科技 UPIC HYDROGEN ENERGY TECH	
 重塑能源	 华丰燃料电池 Toyota Shoufueki Fuel Cell Co., Ltd.	 神力科技 SinoFuelCell	 未势能源 FTXT 未势能源		 氢晨科技 H-RISE					
		 蜂巢蔚领 HYCET 蜂巢蔚领					 博世 科技成就生活之美			 Inspiring science, enhancing life
 Precisely Right.				 鲲 华 科 技						
				 — 燃料电池专家 —					 ANDRITZ Kaiser GmbH	
					 Vacuum Tech NAURA 北方华创		 Beijing Dynamic Power New Energy Tech., Ltd.		 PROFESSIONAL & RELIABLE	 Huahai Technologies
			 实力源科技 POWERTECH	 Fittings & Valves				 Boyan Hydrogen Components 氢能领域燃料电池专业制造商	 New-tech Beyond Time	
	 DALIAN JIARUN TIMES TECHNOLOGY LTD.			 宇科创新 YUKE INNOVATION					 Inspiration for Innovation	
					 HIGH PRESSURE TECHNOLOGIES	 For The Best Solution!	 SHENG YUN TEXTILE (CHINA)			
		 里 德 奥 科 特 元	 中国氢能技术装备、研发、设计、制造		 德尔新能源 DELER NEW ENERGY			 Intelligent ultrasonic solutions		
	 CARBON MOTOR PUMP	 FERTILIZERS OF MIGHTY					 湖南耕驰新能源科技有限公司 Hunan gengchi new energy technology co., ltd			 杜 科 新 材
	 氢能催化用炭用铂									
 YIANTENG SPECIAL ANODES					 INNOVATING TOGETHER	 Technology Create Value	 CLEAN ENERGY SOLUTIONS a tyco company		 CRYOGENICS	

*Listed in no particular order

/03 Exhibition Review-Exhibitors

FEVC 2024



**Listed in no particular order

View the complete list of exhibitors: <http://www.fcvc.org.cn/CN/ExhibitorList/>

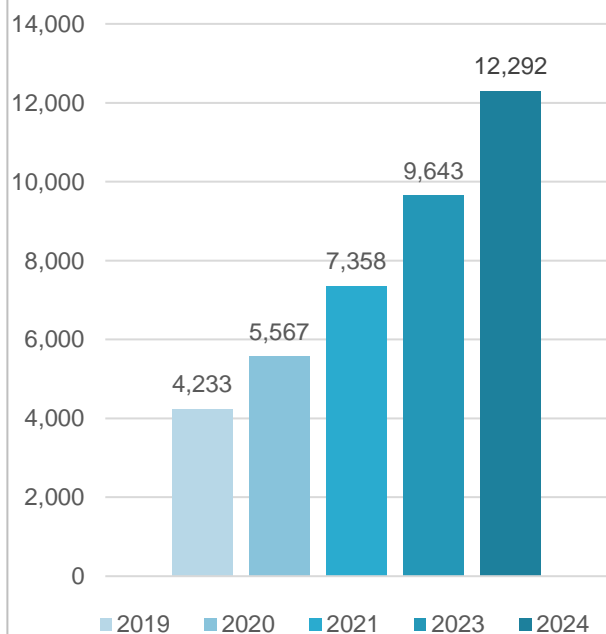
/03 Exhibition Review-Scale of Visitors

FCVC 2024

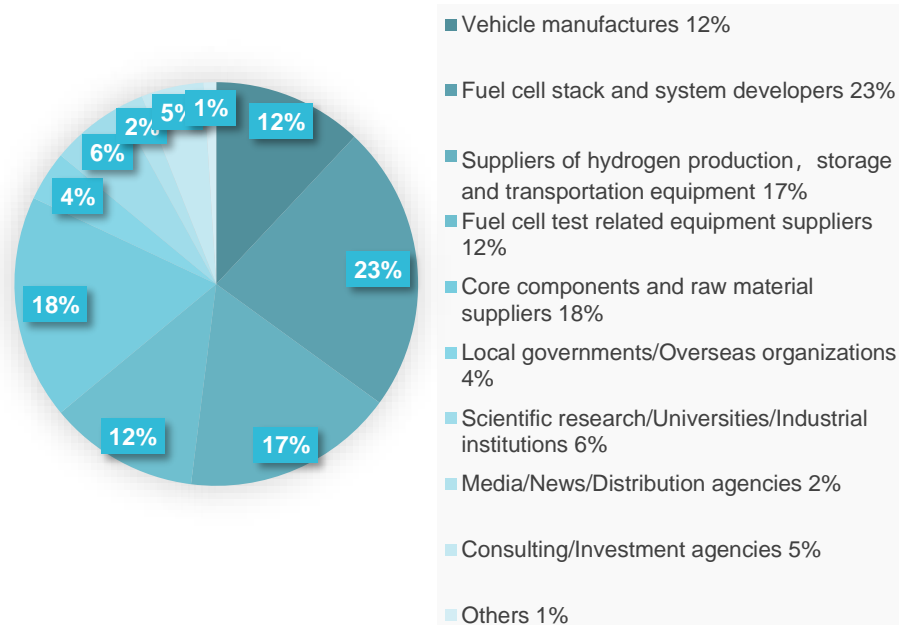
- **Number of visitors: 12,292 Total visits: 35,000+** visits in 3 days
- **52%** of visitors were from vehicle manufacturers, fuel cell stack systems, and hydrogen production, storage, and transportation companies
- **24%** of visitors were from management, **30%** were technical/R&D/design engineers



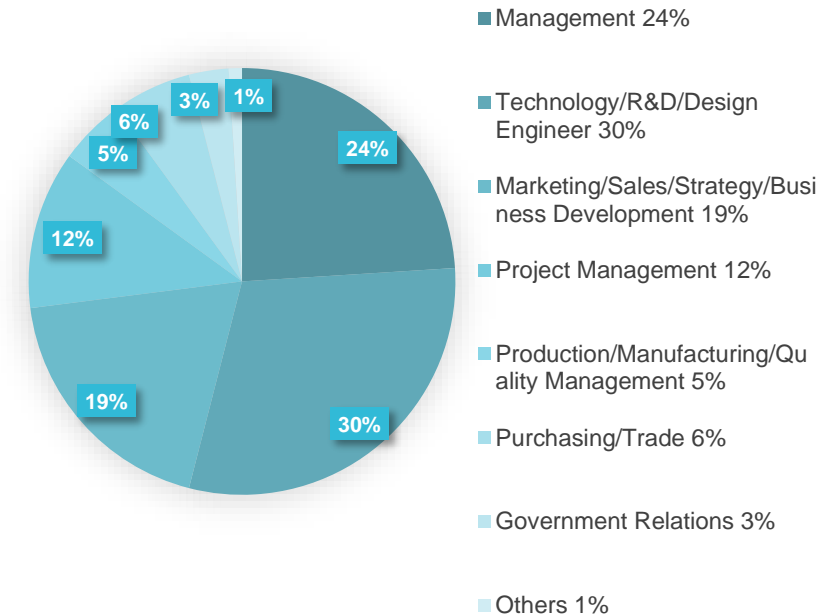
Growth rate of visitors **27.5%**



Analysis by company



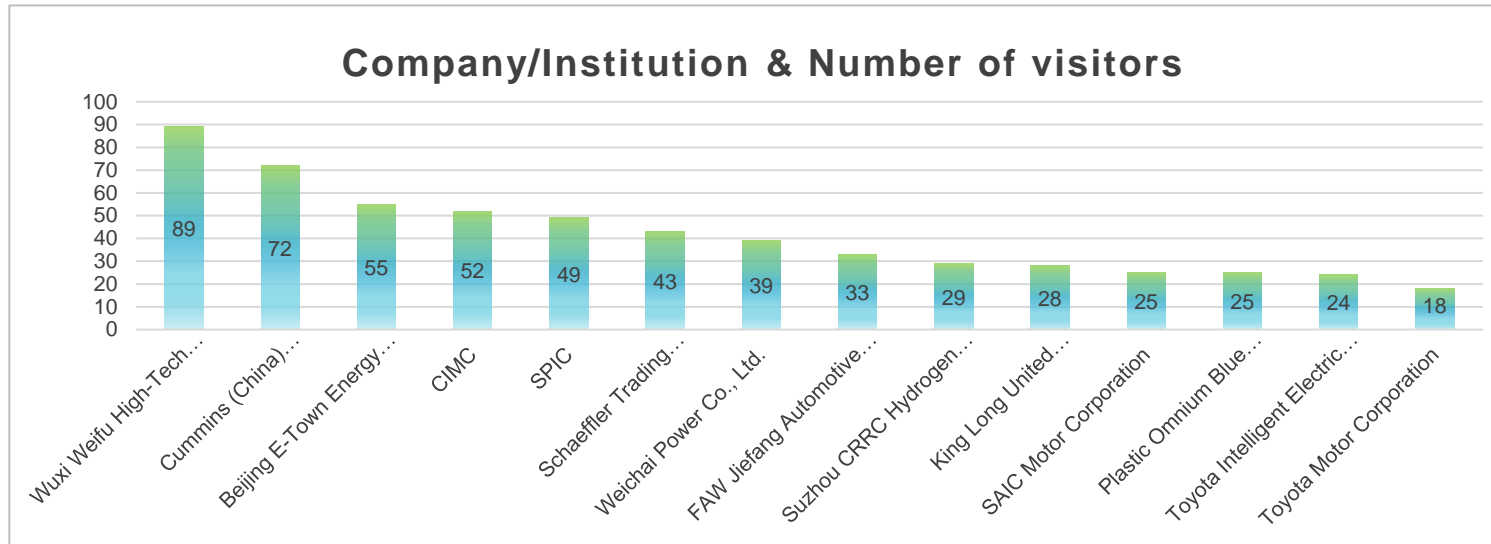
Analysis by department



/03 Exhibition Review-Group of Visitors

FEVC 2024

FCVC 2024 organized **30+** group visits, inviting **key research institutions, universities, vehicle manufacturers, energy companies, and core component enterprises** from the industry to visit the exhibition.



Other professional visitor groups:

- Beiqi Foton
- Parker Hannifin
- Suzhou Wujiang Venture Capital Co., Ltd.
- Deran (Zhejiang) Power Technology Co., Ltd.
- Eaton (China) Investment Co., Ltd.
- Aerospace Hydrogen Energy (Shanghai) Technology Co., Ltd.
- Shanghai Jiao Tong University
- Garrett
- Yangzhou University
- Yancheng Municipal Government Foreign Affairs Office
- Anhui Tomorrow Hydrogen Energy Technology Co., Ltd.
- Suzhou Fersai Energy Technology Co., Ltd.
- Yidong (Shanghai) Automotive Technology Co., Ltd.
- Tongji University
- Shanghai Usui Engine Parts Co., Ltd.
- Shanghai Jichun Hydrogen Energy Technology Co., Ltd.
- Tonghui New Energy Vehicle Innovation Research Institute in Huishan District, Wuxi
- Fengqingyang Hydrogen Technology (Shanghai) Co., Ltd.
- Xingqingyuan (Shanghai) Technology Co., Ltd.

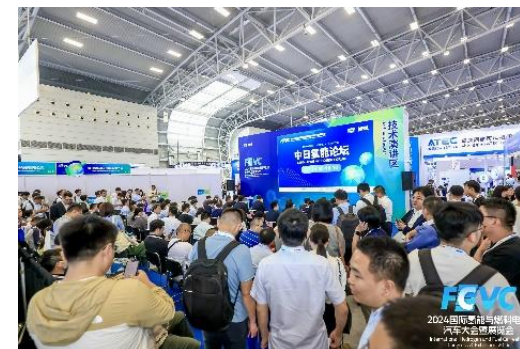


/03 Exhibition Review-Highlight Events

FCVC 2024

- As a highlight of the FCVC 2024, the Technical Theater in 2024 continues to maintain its "high popularity." A total of five themed events were organized: **3 overseas activities, 1 tech session, 1 testing session**, providing exhibition visitors with the latest industry and cutting-edge technology content for a rich participation experience.
- The 3 overseas events included Japan/Canada/Sweden sessions, with 18 executives from overseas institutions and companies introducing the latest industrial development trends, technological advancements, and commercial applications. Collaborating with the **JETRO Shanghai Office, NEDO Beijing Office, and the Consulate General of Japan in Shanghai**, the **"China-Japan Hydrogen Energy Forum" was held for the first time**. We also invited the **Consulate General of Canada in Shanghai, the Canadian Hydrogen Association (CHA), and Business Sweden** to organize the Canada and Sweden sessions respectively.
- 2 exhibitor talks featured 12 experts sharing latest tech & products from hydrogen fuel cell core component and testing firms.

Date	Time	Agenda
June 4	10:20-11:40	Testing Session: Testing technology and solutions
	14:00-16:10	Sino-Japan Hydrogen Forum
June 5	09:40-12:00	Tech Session: Technology and application status of hydrogen fuel cell core components
	14:00-16:20	Canada Session
June 6	10:00-11:30	Sweden Session



/03 Exhibition Review-Highlight Events

FCVC 2024

- FCVC 2024 featured two open forums, including the **Tech2 Stage**, which organized 3 industry events with partners, highlighting the latest market trends, cutting-edge technologies, and hydrogen applications.
- **Sharing of Market Development Trend:** Discussed the development status of hydrogen fuel cell industries in mainland China and Chinese Taipei.
- Tech2 Session: Co-hosted with the **Shanghai Hydrogen Energy Utilization Engineering Technology Research Center**, 10 representatives from industry institutions and enterprises shared insights on hydrogen industry overview, core technologies, and commercialization.
- Co-hosted with the **China Orange Group**, the Media Session was organized for the first time in FCVC. The speech report, media face to face and other activities were carried out on site.

Date	Time	Agenda
June 4	10:20-12:00	Sharing of Market Development Trend
	14:00-16:30	Media Session
June 5	10:00-15:50	Tech2 Session
June 6	09:00-10:30	Hydrogen Energy Science Popularization Events



/03 Exhibition Review-Highlight Events

A number of release and signing activities were held at the site, working together to achieve the effect of "1+1>2". Some of the activities include:

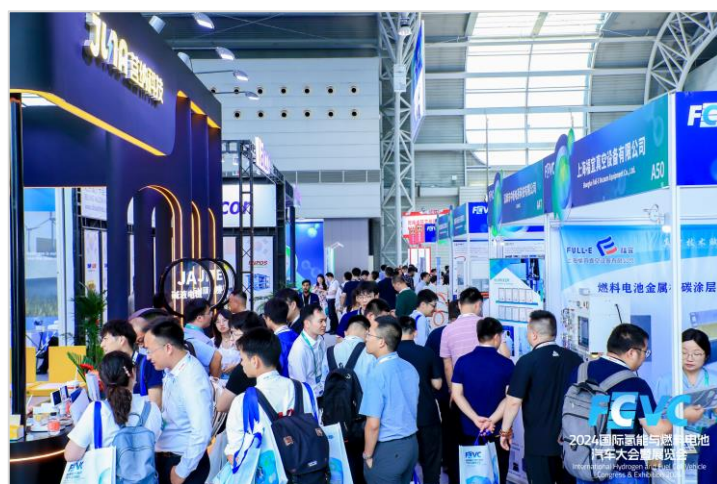
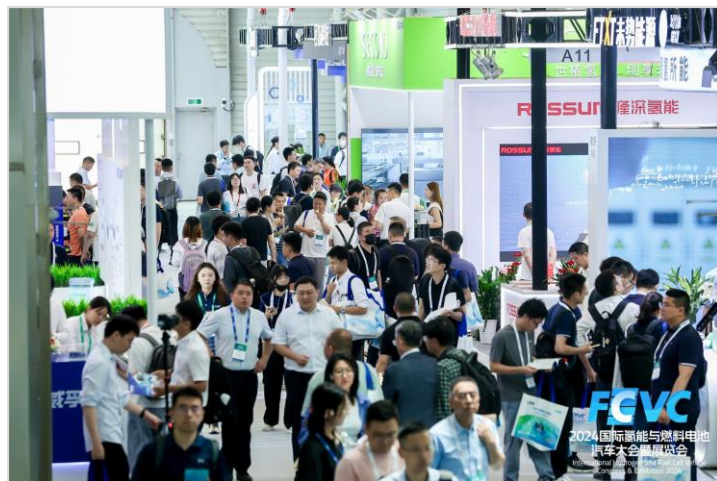
- New product release:** Bosch launched new PEM electrolysis cell test platform, SinoFuelCell released a new generation of high-power graphite plate fuel cell reactor - Gen4 P5X series fuel cell stack, Guofu Hydrogen Energy released "Ram-1200" vehicle liquid hydrogen supply system, Dongde Industrial released high pressure liquid hydrogen plunger pump and hydrogen common rail system DG56, Youon released the world's first solar electrolytic water hydrogen storage energy system.
- Signing ceremony:** Shanghai Engineering Technology Research Center of Hydrogen Utilization signed strategic cooperation agreements with TÜV Rheinland and China Certification and Testing Group Shaanxi Co., LTD, Shanghai Mandian Future Intelligent Technology Co., Ltd. and HYDREAM ENERGY held the signing ceremony of "Light hydrogen electric power scenario promotion Strategic cooperation", Hydrexia Holding Limited and Shanghai Pujiang Gases Co., Ltd. signed a batch magnesium based solid state storage and transportation hydrogen vehicle purchase agreement, TÜV Rheinland held a strategic cooperation signing ceremony with G-Power.

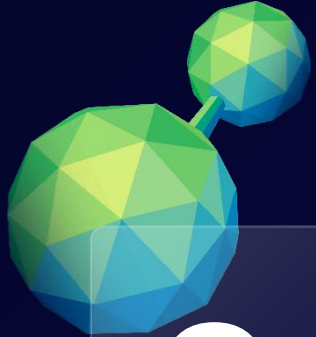
FEVC 2024



/03 Exhibition Review-Spotlight Moments

FEVC 2024





04

Concurrent Events



/04 Concurrent Events-IHFCA Executive Board Meeting

FCVC 2024

The Fourth Session of the First Executive Board Meeting of the International Hydrogen Fuel Cell Association (IHfCA) was successfully held on-site and online in Shanghai, concurrent with 2024 International Hydrogen and Fuel Cell Vehicle Congress and Exhibition (FCVC).



Professor Ouyang Minggao, Chairman of IHFCA, Professor from Tsinghua University, Academician of Chinese Academy of Sciences (CAS), delivered a video speech. Mr. Zhang Jinhua, Standing Vice Chairman of IHFCA, Chairman of China SAE, Mr. Xu Jing, Special Consultant of IHFCA, Mr. Shuji Yuda, Vice Chairman of IHFCA, Deputy General Manager of Toyota Motor (China) Investment Co. were presented at the meeting. Ms. Wang Ju, Secretary General of IHFCA, hosted the meeting, with executive members around the world attending the meeting.



The following resolutions were adopted: The "IHfCA 2023-2024 Annual Work Report " was reviewed and PASSED by vote; The "Regulations for Distinguished Expert Management of the International Hydrogen Fuel Cell Association " was reviewed and PASSED by vote; The "List of Candidates for Vice Chairman Alteration" was reviewed and PASSED by vote.

/04 Concurrent Events- The Launch of Global Hydrogen Initiative FCVC 2024

During the Plenary Session on June 5, China-SAE, IHFCA, Australian Hydrogen Council (AHC), Korea Automobile & Mobility Association (KAMA), Hydrogen Egypt (H2EG), and African Hydrogen Partnership (AHP) reached consensus to jointly promote the development of the hydrogen energy industry and launch the **Global Hydrogen Initiative** together.

The Global Hydrogen Initiative focuses on the following areas:

- Developing collaborative platforms to promote investment in advanced hydrogen technologies to make hydrogen affordable and financeable, accelerating the diffusion and expansion of hydrogen for multi-scenario applications, and working to foster regional and global hydrogen industry cooperation;
- Investing in hydrogen infrastructure, innovating business models, harmonizing standards to achieve breakthroughs in large-scale hydrogen applications, and working to foster cross-sectoral cooperation and international partnerships;
- Developing hydrogen supply chains, facilitating hydrogen trading, advancing manufacturing technologies to bring clean hydrogen and fuel cell vehicles to the mass market, and working to advance global industry value chains through collaborative innovation;
- Promoting best practices, facilitating information exchange, raising public awareness of the low-carbon hydrogen sector, and working to build the capacity of global hydrogen talent.



/04 Concurrent Events- Fuel Cell Vehicle Innovation and Development Strategy Exchange in the New Stage

FEVC 2024

The meeting was successfully held on June 4, 2024 in Shanghai, hosted by Ms. Zheng Yali, Assistant Secretary-General of China SAE and Vice President of the State Automotive Strategy Institute. Renowned experts in the industry and representatives of the demonstration city cluster units conducted in-depth exchanges and discussions on the current situation of the industry, the problems faced and the development proposals, and made suggestions for the high-quality development of China's fuel cell automobile industry.



During the meeting, Mr. Zhang Xiaoqiang, Director of the Senior Experts Advisory Committee of China Center for International Economic Exchanges and former Deputy Director of National Development and Reform Commission, and Mr. Lu Qiang, Researcher of National Automotive Strategy Institute of China SAE, delivered keynote speeches on "Promoting the High-quality Development of the Hydrogen Energy Industry" and "The Current Situation of China's Fuel Cell Vehicle Industry and Policy Suggestions".

Participants expressed their views on how to improve the economy of hydrogen energy and fuel cell vehicles and promote the demonstration and promotion of a wider range, larger scale and higher quality. Together, they discussed the problems that constrain the high-quality development of the industry in demonstration work, shared the specific problems faced by the industry, and put forward targeted and practicable policy recommendations.

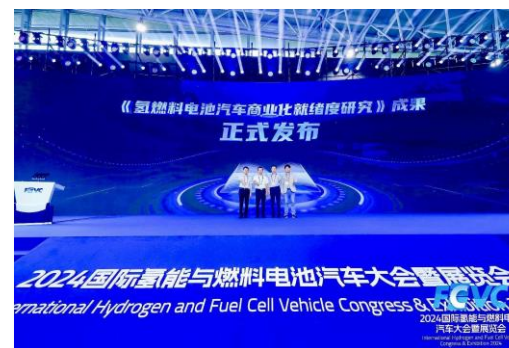
/04 Concurrent Events- FCV-CRL Results Release

FCVC 2024

On June 6, the results of FCV-CRL Research Program was officially released during FCVC. The study was led and initiated by China SAE, with Shanghai International Automobile City (Group) Co., Ltd, Shanghai Electric Vehicle Data Center, Zhonghexinxing Energy Science and Technology Research Institute, and Foshan Institute of Environmental and Energy Technology, participating in the work.



The study shows that the technology level and promotion scale of fuel cell vehicles have achieved remarkable results, and the conditions for large-scale promotion are already in place, with the characteristics of typical application scenarios are becoming clearer and the industry entering the adjustment phase. There is an urgent need to focus on the improvement of hydrogen supply capacity and market scale, integrate resources, increase support, promote the application in cross-regional scenarios, accelerate the enhancement of product competitive advantages, and promote the industry as a whole.



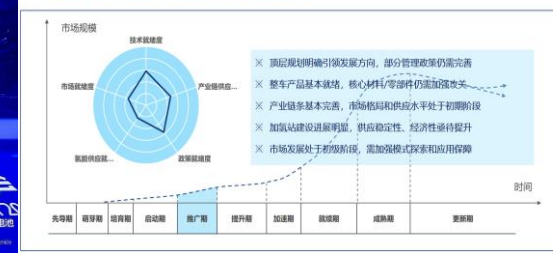
4. 总结与建议

□ 总体来看，燃料电池汽车技术水平及推广规模成效显著，已具备大规模推广条件，典型应用场景特征清晰，产业整体发展进入推广期调整阶段，亟需聚焦氢能供应能力及市场规模提升，整合优势资源，推进更大范围、跨区域场景的推广应用，加快提升产品竞争优势，促进产业整体向提升期迈进。

- 01 加快补齐技术短板，推动全链条发展完善。重点开展关键材料攻关，国产材料上车应用，加快国产高性能材料及部件技术突破和规模化装车应用；加快完善后市场标准规范及监管要求，鼓励模式创新，推动全产业链健康发展。
- 02 保障氢能稳定供应，提升车辆使用经济性。加强氢能供给，围绕氢能上游环节给予财政政策支持，保障氢能稳定供应；加快打造规模化低成本车用氢气供应体系。
- 03 凝聚优势场景共识，集中资源提升规模。出台氢能场景应用激励政策，保证政策实施效果的稳定性；聚焦优势场景，加大资源投入和支持力度，出台燃料电池汽车高速通行费减免、通行优惠等专项车辆跨区域运行，加快提升车辆规模，带动产业链降本增效发展。
- 04 加强氢能科普宣传，推动形成社会共识。一方面，加强氢能安全法规、安全标准宣贯工作，提升公众对氢能安全利用基础；另一方面，通过广泛的国内外项目合作、学术交流、行业活动等，加强社会对氢能的认知，消除发展顾虑，促进发展共识。

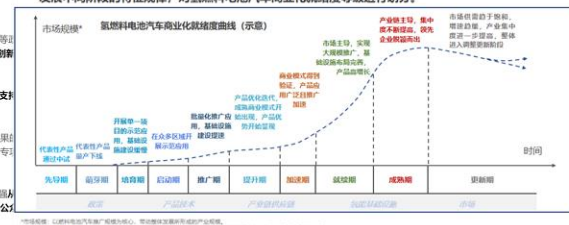
2.3 产业整体就绪进展评价

□ 基于FCV-CRL评价体系，结合就绪度专家研讨及评分，得到产业化就绪度综合评价：2023年，燃料电池汽车产业整体处于推广期调整阶段。



2.1 产业化就绪度等级划分

□ 面向燃料电池汽车多场景商业化应用就绪目标，即“产业链供应基本成形，产品性能满足多场景需求并实现批量化应用。政策、基础设施等保障体系完善，产业呈现市场驱动、快速发展态势”，同时结合产业发展不同阶段的特征规律，对氢燃料电池汽车商业化就绪度等级进行划分。



/04 Concurrent Events-Seminars/Forums/Close-Door Session

FCVC 2024



On June 4, IHFCA held a seminar on green hydrogen industry technology development during FCVC. Around the report "Global green hydrogen outlook: advancing the industry value chain for a low-carbon future", participating experts exchanged and discussed their ideas.



On June 4, the Global Hydrogen Industry Association Alliance (GHIAA) FCVC Summit was successfully held in Shanghai, China. Representatives from Europe, Australia, Egypt, Africa and other countries and regions discussed the development of global hydrogen energy industry and international cooperation.



On June 4, a closed-door meeting on hydrogen energy industry investment, organized by Anglo American and co-organized by YONGHUA CAPITAL and SINOLINK Securities, was held during the FCVC, which invited first-line industry leaders and investors in hydrogen energy to discuss how far away we are from hydrogen energy parity?



/04 Concurrent Events-Plant Tour and Signing Ceremony

FEVC 2024

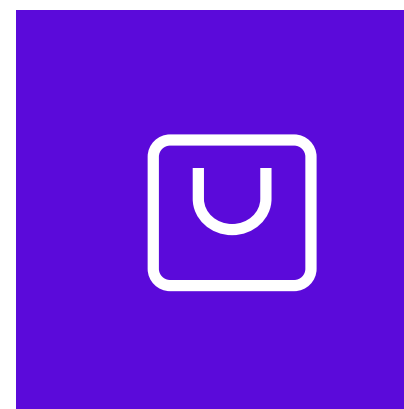
Plant Tour

On June 3, IHFCA organized a delegation of international experts to participate in the 2024 FCVC Plant Tour. Members are from H2Korea, Australian Hydrogen Council (AHC), Hydrogen Egypt (H2EG), Hydrogen Europe, African Hydrogen Partnership (AHP), Hydrogen Consortium of Taiwan, and Hyundai Motor Korea. The delegation of international experts visited REFIRE, SHPT and Sunwise, having in-depth exchanges and discussions with these companies.



Signing Ceremony

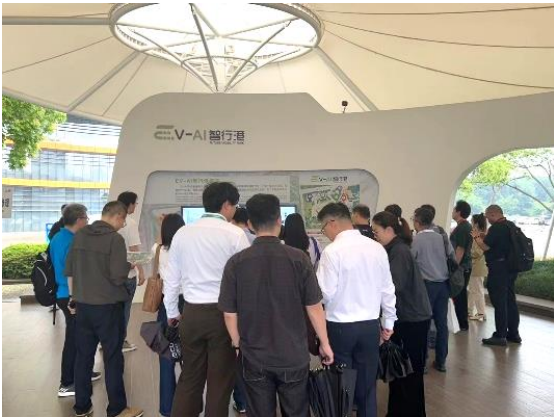
On June 4, China SAE and State Power Investment Corporation Hydrogen Energy Co., Ltd held a strategic cooperation agreement signing ceremony during FCVC. Mr. Hou Fushen, Vice Chairman and Secretary General of China SAE, and Mr. Wang Meng, Chief Economist of SPIC Hydrogen Energy, attended the ceremony. Mr. Zheng Yali, Assistant Secretary General of China SAE, and Mr. Chen Ping, Assistant General Manager of HST, signed the strategic cooperation agreement on behalf of both parties.



/04 Concurrent Events-Technical Tour

FEVC 2024

On June 4-5, FCVC organized a “**Tech Tour**” for conference delegates and exhibition visitors, with a total of more than 80 industry colleagues participating in the two-day event. The TECH Tour visited two sites, including the data platform, hydrogen testing base and hydrogen refueling station, which further demonstrated the development achievements of hydrogen energy in Jiading and enriched the experience of the participants.



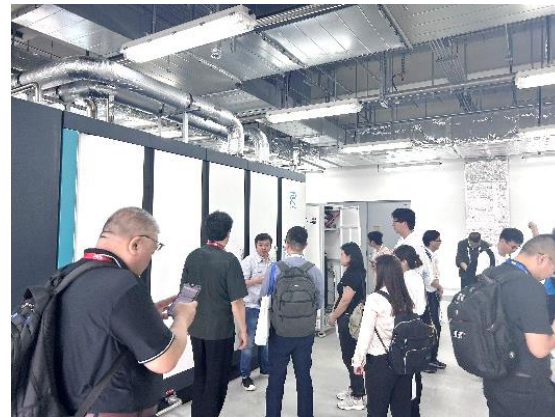
Visit Sites:

First station: Jiading EV Zone

- National Fuel Cell Vehicle Demonstration Application Shanghai City Cluster Hydrogen Energy Achievement Exhibition
- Shanghai Hydrogen Refueling Station and Hydrogen Fuel Cell Vehicle Public Data Platform

Second station: Shanghai Auto Inspection Hydrogen and Fuel Cell Testing Base

- EMC (Electromagnetic Compatibility) Laboratory, Fuel Cell Stack Laboratory
- Other laboratories include light and heavy duty vehicle rotating hub environment laboratory, fuel cell vehicle four-drive power assembly laboratory, fuel cell engine laboratory, etc.
- Hydrogen refueling station at Hydrogen Port

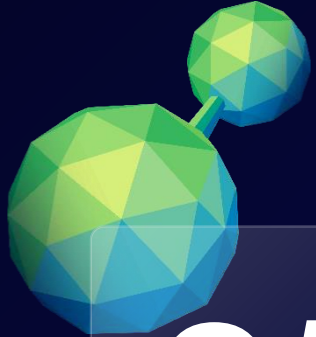


/04 Concurrent Events-Hydrogen Energy Science Popularization Events **FEVC 2024**

FCVC 2024, together with Shanghai International Automobile City and Hyundai Motor Group, organized the "Hydrogen Energy Science Popularization Activity" on site for the first time to further promote hydrogen science popularization. Relevant leaders of Shanghai Economic and Information Commission, Shanghai International Automobile City, industry experts and enterprise representatives were invited to attend, and 40 teachers and students from Shanghai Jiading Zhuqiao School participated. The event consists of three sessions:

- Shanghai City Cluster fuel cell demonstration application science Innovation research map 2.0 released
- Investigation of the current situation and future development of hydrogen vehicles (new energy vehicles)
- Hydrogen energy science popularization activities by Hyundai Motor Group





05

Marketing and Media



01

Media Partners

60+ Media Partners: Xinhua News Agency, CCTV Auto, China Daily, Global Times, China.org.cn, CRI Online, CNR, THE PAPER, Bloomberg News, 21st Century Business Herald, National Business Daily, China Automotive News, China Energy News, China Industry News, CLS, Sina Auto, Souhu Auto, etc

90+ reporters attended and participated in activities such as conference coverage and high-level interviews

02

Live Broadcasting

Plenary Session: **25** units of live broadcasting, including Xinhua News Agency, CCTV Auto, China.org.cn, CNR, 21st Century Business Herald, China Auto News, CLS, Sina Auto, Souhu Auto, We-media platforms of China SAE, IHFCA and FCVC channel. **2.6 million+** online watching

Online Tour: first online tour via FCVC Channel, with more than **10,000** online guests

03

Spot Coverages

30 Interviews in total

13 Exclusive interviews for sponsors, **18** Exhibitors video interviews



Interviews

Online Tour

/05 Marketing and Media

04

Content Output

- 20+ Core press releases
- 15 Conference Shorthand manuscripts collated
- 500+ Original manuscript & video
- 40+ Posters and long drawings for conferences and exhibitions

05

Internal Promotion Channels

- 200,000+ Official website views 2,000+ Electronic invitation readers
- 150+ Ems-cnpl article 100,000+ Total reading
- 6,000+ Followers increase 400,000 Edm&Sms

06

External Promotion Channels

- 3.5 million+ Advertising impressions
- 1 million+ WeChat Ads impressions
- 1.2 million+ PR script readings
- 2,000+ visitors invited by the exhibitors

07

Exhibition On-site Activities

- Theme postcards and FCVC WALK

FCVC 2024



Official Platforms



Strategy Media Partners



Media Partners





2024国际氢能与燃料电池汽车大会暨展览会

International Hydrogen and Fuel Cell Vehicle Congress & Exhibition 2024

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FCVC Mini Program

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Exhibition Catalogue



FCVC Wechat



FCVC Channel