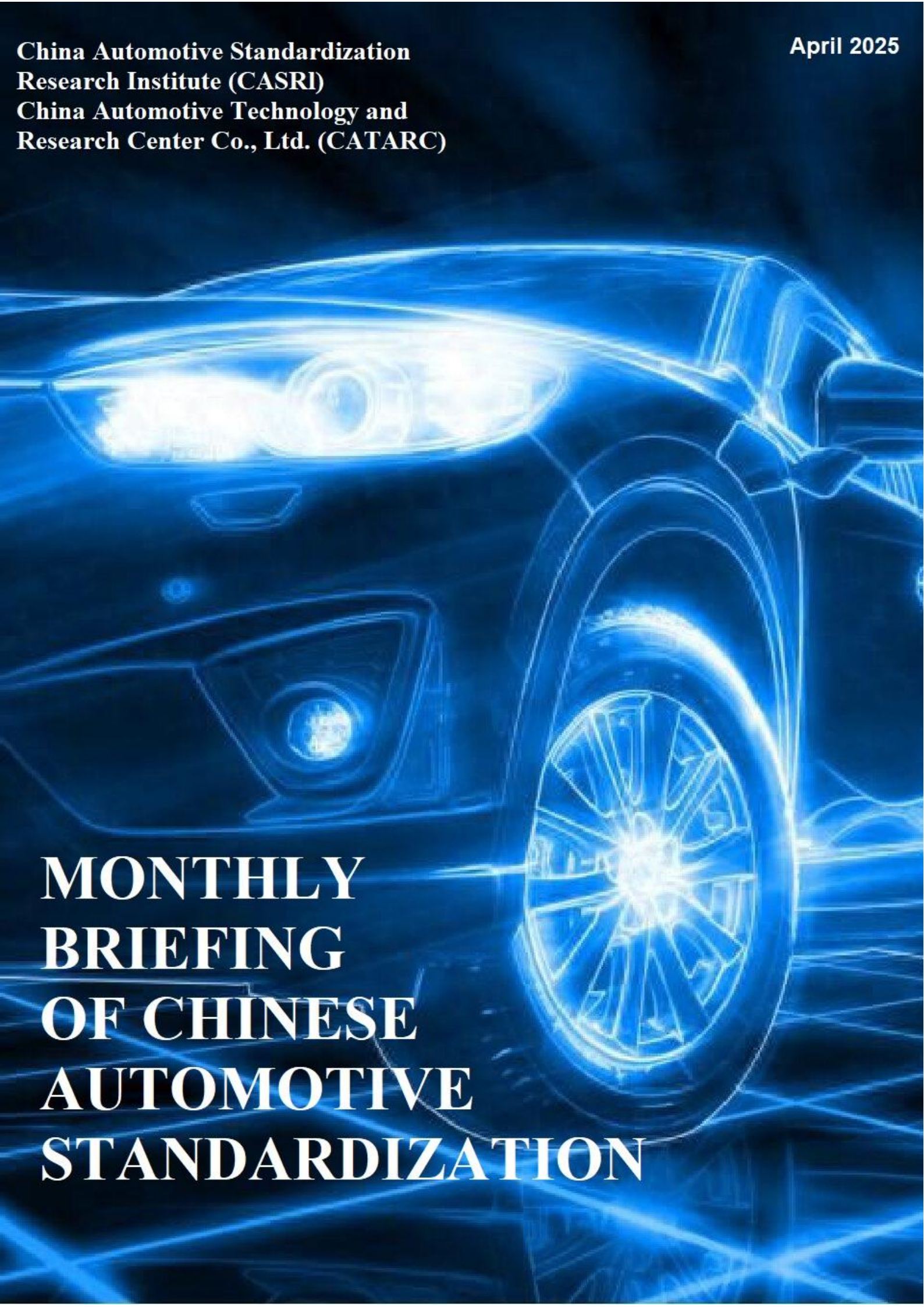
China Automotive Standardization Research Institute (CASRI)
China Automotive Technology and Research Center Co., Ltd. (CATARC)

April 2025



MONTHLY BRIEFING OF CHINESE AUTOMOTIVE STANDARDIZATION

I. Recent policies

01 MIIT (Ministry of Industry and Information Technology) has released the "Key Points of Automobile Standardization Work in 2025"

On April 28, 2025, MIIT released the "Key Points for Automotive Standardization Work in 2025" (hereinafter referred to as the "Key Points") to further improve the standard system, enhance the quality and efficiency of standards, strengthen implementation and application, give full play to the leading and guaranteeing role of standards, and use standards to facilitate the transformation and upgrading and high-quality development of the Chinese automotive industry.

The "Key Points" consist of 23 items in five aspects. These include promoting the approval, release and implementation of standards such as design and operation conditions for autonomous driving, autonomous parking, and autonomous driving simulation testing, accelerating the development of mandatory national standards for safety requirements of autonomous driving systems, and establishing a safety baseline for autonomous driving systems.

The "Key Points" cleary state that China will promote the release of standards for remote service and management of electric vehicles and the implementation of standards for safety requirements of power batteries, advance the review and approval of standards for safety requirements of electric vehicles, conduct pre-research on mandatory national standards for safety requirements of fuel cell electric vehicles and power battery recycling and utilization, and continue to improve the safety level of electric vehicles. The formulation and revision of mandatory national standards such as integrated driving assistance systems and automatic emergency braking systems will be accelerated and the standards for lane keeping assistance systems will be revised. The development of standards such as reversing assistance will be promoted to improve the safety level of driving assistance products.

The "Key Points" also proposes to promote the release and implementation of mandatory national standards for side and rear collisions, etc, carry out research on the formulation and revision of standards on test methods, reliability, NVH, human-machine engineering, etc., to continuously promote the improvement of automotive quality. China will conduct in-depth research on standardization of user experience and research on new product technologies and standards such as hidden door handles, active pre-tensioning seat belts, reclined seats and in-car warning sounds.

In addition, the "Key Points" also include building a standard system, expanding international cooperation on standards, and improving the governance of automotive standards.

02 MIIT issued the notice about the "Key Points of Standardization Work for Industry and Information Technology in 2025"

On April 8, 2025, MIIT issued the "Key Points of Standardization Work for Industry and Information Technology in 2025" (hereinafter referred to as the "Key Points"), which deployed a total of 26 specific tasks in seven aspects.

The "Key Points" says China will strengthen the formulation of standards for conventional industries, advantageous industries, emerging industries and future industries, accelerate the supply of standards for high-end, intelligent and green

manufacturing, improve the system of mandatory national standards for industry and information technology, enhance the internationalization of standards, lead high-quality development of industries, and lay a solid foundation for fully fulfilling the goals and tasks of the 14th Five-Year Plan and achieving a good start to the 14th Five-Year Plan.

The "Key Points" clearly state that in order to build a modernized industrial system, China will implement the New Industry Standardization Leading Project Implementation Plan (2023-2035), continue to improve the standard system for emerging industries, make forward-looking plans for future industry standard research, formulate more than 1,800 industry standards, and establish more than 5 standardization technical organizations for emerging industries and future industries. In order to secure the bottom line of industrial development, China will compile guidelines for the construction of a mandatory national standard system for industry and information technology and organize the formulation of more than 100 mandatory national standards. In order to promote the globalization of industries, more than 100 international standards led by Chinese enterprises and institutions will be supported, and the conversion rate of international standards across the industry will reach 88%. China will enhance the modernization of industry governance capacity to provide a strong guarantee for promoting new industrialization and building a manufacturing power and a cyber power.

03 SAMR (State Administration for Market Regulation) revised and issued the "Measures for the Adoption of International standards"

On April 21, 2025, SAMR revised and issued the "Measures for the Adoption of International standards" (hereinafter referred to as the "Measures"), which will come into effect on June 1, 2025. The main contents of the revision include five aspects.

The first is to clarify the scope of the international standards to be adopted and the scope of the standard-adopting entities. The "Measures" specify that the international standards to be adopted are those developed and published by the three major international standard organizations (ISO, IEC and ITU). Adopting international standards means equating or modifying the content of international standards and converting them into China's national standards.

The second is to establish a full-process tracking mechanism for international standards. The "Measures" stipulate that domestic organizations undertaking the counterpart work of the technical institutions of the international standardization organizations shall keep track of the latest progress and development trends of relevant international standards and notify the national technical committee for professional standardization and other relevant parties within 30 days from the date of completion of each stage of the formulation of international standards.

The third is to clarify the requirements for the formulation cycle of national standards that adopt international standards. The "Measures" clearly stipulate that projects adopting international standards should be given priority for approval. The period from the planned issuance to the submission of materials for approval for projects adopting international standards shall generally not exceed 12 months. For projects whose target international standards are being developed, it is encouraged that the national standards be developed and implemented simultaneously with the corresponding international standards.

The fourth is to strengthen the requirements of copyright policies. The "Measures" put forward requirements for copyright protection in multiple stages, including the project initiation assessment, approval review, and public release of national standards adopting international standards. It clearly stipulates that the public release of the text of national standards adopting international standards should comply with the relevant requirements of Chinese laws and regulations and the copyright policies of the international standardization organizations.

The fifth is to improve the supervision and error correction mechanism for the adoption of international standards. The "Measures" stipulate that the administrative department for standardization under the State Council shall uniformly organize and carry out the assessment of the implementation effect of national standards adopting international standards in key areas. The relevant administrative departments of the State Council shall, in accordance with their duties, organize and carry out the assessment of the implementation effect of the national standards adopting international standards in their respective departments and industries. If problems are found during the assessment, the problems and suggestions for revision shall be promptly fed back to the corresponding international standardization organization.

04 Ten departments including the Ministry of Transport published the guidelines on promoting the integrated development of transportation and energy

On April 25, 2025, ten departments including the Ministry of Transport, the National Development and Reform Commission, MIIT, the Ministry of Natural Resources, the National Energy Administration, the National Railway Administration, the Civil Aviation Administration of China, the State Post Bureau, State Grid Corporation of China and China Southern Power Grid Co., Ltd. published the "Guidelines on Promoting the Integrated Development of Transportation and Energy" (hereinafter referred to as the "Guidelines").

The "Guidelines" emphasizes that by 2027, the proportion of new energy vehicles in newly increased vehicles will rise year by year, and the capacity for green fuel production in transportation will be significantly enhanced. By 2035, pure electric vehicles will become the mainstream of new sales vehicles, and new energy operational heavy trucks will be applied on a large scale, s well as the supply system of green fuel for transportation will be basically established.

The "Guidelines" suggests strengthening the coordination and interaction between the transportation infrastructure network and the energy network. China will vigorously promote intelligent charging facilities and vehicle-to-grid interaction technologies, incorporate vehicle-to-grid interaction into power demand side management, and promote it in tandem with the development of the power market. Also China will accelerate the promotion of new energy vehicles and the electrification of vehicles in the public domain, continue to promote the application of new energy vehicles in urban public transportation, taxis, postal and express delivery, urban freight distribution, ports and airports, urge the phase-out and renewal of vehicles that meet National IV and below standards, encourage the large-scale application of new energy heavy-duty trucks based on local conditions, and develop zero-emission freight transportation. New models and the incubation of new industries will be encouraged while the resources such as distributed power sources, electric vehicles, and charging (battery swapping) facilities will be aggregated to create virtual power plants in the transportation sector. Business model innovations such as the separation of vehicles and batteries will be encouraged and the emerging industries such as battery asset management and financial leasing of new energy transportation equipment will be vigorously developed to build an industrial innovation platform for the intelligent integration of vehicles, stations, charging piles and networks. In this way China can nurture and establish an innovative automotive ecosystem that deeply integrates new energy vehicles with smart energy, intelligent transportation and smart cities.

The "Guidelines" clearly state that standards and norms should provide stronger support to industrial development. China will promote the formulation and revision of standards related to the development and utilization of clean energy in

transportation infrastructure, electric heavy-duty trucks, hydrogen heavy-duty trucks, electric ships, vehicle-to-grid interaction, power batteries, charging (battery swapping) stations and hydrogen refueling stations, and improve standards on safety, energy conservation and environmental protection. The standards for the "production, storage and use" of green fuel in transportation will be studied and issued. The mutual recognition of international standards and the cooperation in the field of international standards will be enhanced while the improvement of the green fuel certification system for transportation will be accelerated.

05 Four authorities including NDRC (National Development and Reform Commission) issued the notice on announcing the first batch pilot projects for large-scale application of vehicle-to-grid interaction

On April 2, 2025, NDRC, National Energy Administration, MIIT and SAMR jointly issued the "Notice on Announcing the First Batch Pilot Projects for Large-scale Application of Vehicle-to-Grid Interaction" (hereinafter referred to as the "Notice") to support the construction of a new energy system and a new electricity power system and promote the integration and interaction between new energy vehicles and the power grid.

According to the "Notice", after expert review, the first batch pilot projects for large-scale application of vehicle-to-grid interaction include nine cities including Shanghai and 30 projects including the "Beijing Pilot Project for V2G Vehicle-to-Grid Interaction and Coordinated Regulation Based on New Energy Storage".

The "Notice" requires that the departments in charge of the development of charging facilities in each province (autonomous region, municipality directly under the Central Government) work together with the departments of development and reform, energy, industry and information technology, and market supervision to organize the relevant departments of the pilot cities and the construction units of the pilot projects to actively promote the pilot construction, strive for practical results, submit the summary of the pilot work to the Electricity Department of the National Energy Administration and send a copy of the summary to the Infrastructure Development Department of the NDRC by the end of 2025 .

II. Standardization updates in April

01 Automotive standard plans assigned in April

(1) Plans of national standards

Serial No.	Name of the standard
1	On-board radio broadcast receiving system

Serial No.	Name of the standard
2	Road vehicles — General requirements for the use of recycled materials
3	Recovery of traction battery used in electric vehicles — Recycling — Part 4: Specification for recycling report
4	Test methods for efficiency of driver motor system for electric vehicles
5	Road vehicles — Test devices for assessing the perceptual function of intelligent connected vehicles — Part 1: Requirements for passenger cars rear-end targets
6	Road vehicles — In-vehicle Ethernet — Part 10: Transport layer and network layer conformance test plans
7	Road vehicles — In-vehicle Ethernet — Part 4: General requirements and test methods of optical gigabit Ethernet components
8	Automotive millimeter-wave radar performance requirements and test methods

(2) Plans of the foreign language versions of China national standards

Serial No.	Name of the standard
1	On-board radio broadcast receiving system
2	Test methods for efficiency of driver motor system for electric vehicles

02 Automotive standards soliciting public opinions in April

Serial No.	Name of the standard	Type
1	Electrical performance requirements and test methods for electric double-layer capacitors used in hybrid electric vehicles	National
2	Road vehicles — Test devices for assessing the perceptual function of intelligent connected vehicles — Part 4: Requirements for bicyclist targets	National
3	Road vehicles — Test devices for assessing the perceptual function of intelligent connected vehicles — Part 3: Requirements for passenger vehicle 3D targets	National
4	Test methods for energy consumption of light-duty hybrid electric vehicles (the No.1 Amendment)	National
5	Specifications of on-board energy consumption monitoring for passenger cars	National
6	Road vehicles — Safety chains for trailers up to 3.5t	National
7	Technical requirements and testing methods for advanced emergency braking system of light-duty vehicles	National

Serial No.	Name of the standard	Type
8	The safety requirements for bus construction	National
9	The safety technical specification of special school bus	National
10	Road vehicles — Requirements and test methods of electromagnetic compatibility	National
11	Requirements and measurement methods of light-duty vehicles forward visibility for drivers	National
12	Thermal management system for electric vehicle traction battery — Part 3: Air cooling system	Industrial
13	Thermal management system for electric vehicle traction battery — Part 4: Heater	Industrial
14	Thermal management system for electric vehicle traction battery — Part 5: Direct cooling and heating system	Industrial
15	Carbon footprint of road vehicle products — Product category rules — Engine	Industrial
16	Road Vehicle — Carbon emissions accounting and reporting for enterprises — Engine manufacturing enterprise	Industrial
17	Automotive intelligent manufacturing — Function requirements for R&D collaborative platform	Industrial
18	Intelligent manufacturing for vehicle — Mass customization — Part 1: General requirements	Industrial
19	Automotive infrared thermal imaging chip technical requirements and test methods	Industrial
20	Motor vehicle's closure system performance requirements and test methods	Industrial
21	Formats of automotive product drawings	Industrial
22	Measuring method for friction coefficient of screw thread pair of automobiles	Industrial
23	Permissible variations in dimensions without tolerance indication for steel die forgings for automobile made by horizontal press forging process	Industrial

03 The reviewing of automotive standards in April

Serial No.	Name of the standard	Type
1	Test method of system power of hybrid electric vehicles and pure electric vehicles having more than one propulsion electric machine	National
2	Plug-in hybrid electric commercial vehicles — Specifications	National
3	Electro-switchable smart glazing used on road vehicle — Part 1: Organic electrochromic glazing	National
4	Electro-switchable smart glazing used on road vehicle — Part 2: Polymer dispersed liquid crystal glazing	National
5	Electro-switchable smart glazing used on road vehicle — Part 3: Suspended particles glazing	National

Serial No.	Name of the standard	Type
6	Road vehicle — General requirements for greenhouse gas management — Part 1：Terms and definitions	National
7	Road vehicle — General requirements for greenhouse gas management — Part 2：Carbon footprint labels of road vehicle products	National
8	Disc wheels for trucks — Dimensional characteristics of attachment on hub	National
9	Intelligent and connected vehicle — Technical requirements and test methods of vehicle-controlled operating system	National
10	Intelligent and connected vehicle — Technical requirements and test methods of in-vehicle operating system	National
11	Technical specification and test method for reduction gearbox of battery electric vehicles	Industrial
12	Specifications and test methods of range extender for electric vehicles	Industrial
13	Specifications and test methods of drive motor controller for electric vehicles	Industrial

04 Automotive standards submitted and awaiting approval in April（National）

Serial No.	Name of the standard
1	Performance requirements and bench test methods for automobile hydraulic brake caliper assembly
2	Automobile dual mass flywheel assembly
3	Electromagnetic clutch for automobile cooling system
4	Steering wheel heating device for automobile
5	Automotive transmission control unit
6	Service door emergency controller
7	Automotive engine — Roundwire snap rings for piston pinholes
8	Technical requirements and testing methods for analog front end chip of battery management system in electric vehicles
9	Technical requirements and test methods of power drive chip for electric vehicles

Serial No.	Name of the standard
10	Fuel cell electric vehicle — Specifications of online monitoring system for on-board hydrogen system
11	Evaluation method for carbon emission reduction of electric vehicle in driving phase
12	Vehicle door outside handle (No.1 Amendment)

05 Automotive standards published in April (National and industrial standards)

Serial No.	Standard No.	Name of the standard
1	GB 45672-2025	On-board accident emergency call system
2	GB 20071-2025	The protection of the occupants in the event of a lateral collision
3	GB/T 45603-2025	Specification of categories of light sources for power-driven vehicles
4	GB/T 45529-2025	Road vehicles—Electrical electronic switching devices—Relay
5	GB/T 45503-2025	The code of practice for automotive ethernet ECU test
6	GB/T 45500-2025	Automotive lidar performance requirements and test methods
7	GB/T 40711.5-2025	Off-cycle technology/device energy saving effects evaluation methods for passenger cars—Part 5: Generator
8	GB/T 40425.2-2025	Overhead contact charging system for electric buses—Part 2: Charging connection set
9	GB/T 40032.2-2025	Safety requirements of battery swap for electric vehicles—Part 2: Commercial vehicle
10	GB/T 32960.3-2025	Technical specifications for remote service and management system for electric vehicles—Part 3：Communication protocol and data format
11	GB/T 18487.4-2025	Electric vehicle conductive charging and discharging system—Part 4: Discharging requirements for electric vehicle
12	GB/T 13594-2025	Performance requirements and test methods of anti-lock braking system for commercial vehicle and trailer
13	QC/T 1218-2025	Dump semi-trailer
14	QC/T 1219-2025	Composite integrated footstep for autotruck
15	QC/T 1220-2025	Hydraulic hose assembly for commercial vehicle clutch
16	QC/T 1221-2025	Modified polypropylene door panel for automobile
17	QC/T 1222.1-2025	Automotive engines—Surface treatment layer of piston rings—Inspection method—Part 1: chromium based ceramic composite coating
18	QC/T 1222.2-2025	Automotive engines—Surface treatment layer of piston rings—Inspection method—Part 2: PVD coating
19	QC/T 1223-2025	Special requirements for the heavy commercial vehicle and combination vehicles fitted with lift axle
20	QC/T 1224-2025	Method for judging spring effect of commercial vehicle equipped with air suspension
21	QC/T 798-2025	Multi-layers plastic tubing for automotive fuel system

Serial No.	Standard No.	Name of the standard
22	QC/T 631-2025	Exhaust muffler assembly of automotive
23	QC/T 544-2025	Camshaft of automobile engine
24	QC/T 289-2025	Oil pump of Automobile engine
25	QC/T 471-2025	Automotive diesel engine
26	QC/T 983-2025	Test method for cleanliness of automobile transmission assembly
27	QC/T 476-2025	Requirement and test method for rain proof performance of bus
28	QC/T 1225-2025	Curtain side semi-trailer
29	QC/T 935-2025	Kitchen garbage vehicle
30	QC/T 283-2025	Automotive engines—Pistons with ring carrier
31	QC/T 552-2025	Piston for engines of automobile and motorcycle
32	QC/T 266-2025	General principles of general tolerances for automotive parts
33	QC/T 1226-2025	Road vehicles—Shielded balanced cable with a specified bandwidth up to 10 GHz
34	QC/T 262-2025	Metallographic examination for automobile carburized gears
35	QC/T 272-2025	Technical Specifications of Aluminum Alloy Castings for Automobiles
36	QC/T 273-2025	Technical Specifications of Aluminum-Alloy Die Casting for Automobiles
37	QC/T 502-2025	Metallographic examination for steel automobile parts by induction hardened
38	QC/T 29018-2025	Metallographic Examination for Automobile Carbonitriding Gears
39	QC/T 326-2025	Numbering rules for automotive standardized parts
40	QC/T 222-2025	Dump truck
41	QC/T 1227-2025	Technical specifications for automobile bevel box
42	QC/T 1228-2025	Test method for automotive organic light emitting diode (OLED) light Sources
43	QC/T 531-2025	Motor vehicle mirrors
44	QC/T 1229-2025	Fuel cell electric vehicles—Refuelling communication protocol
45	QC/T 1230-2025	Wheel drive axle of electric bus

Contact Us

Editor	Li Wen	liwen@catarc.ac.cn
Contact persons	Lu Chun	luchun@catarc.ac.cn
	Zhang Honghe	zhanghonghe01@catarc.ac.cn
	Fang Zili	fangzili@catarc.ac.cn