Translation

The following is a list of 67 applied technologies that the Chinese government selected in 2025 as its top priorities for commercialization. Most of the technologies on the list are key processes, systems, or components for economically or strategically important industries. For each technology, the government identified a company, research institute, or university that it has tasked with commercializing it. Notably, the vast majority of the tasked entities on the list are state-controlled, indicating that the Chinese government remains skittish about entrusting strategic technology development to the private sector.

Title
2025 Annual List of High Technology Achievement Industrialization Pilot Projects for the National Key Research and Development Program
2025年度国家重点研发计划高新技术成果产业化试点名单

Author
General Office of the Ministry of Industry and Information Technology (工业和信息化部办公室)

Source
Ministry of Industry and Information Technology (MIIT) website, January 23, 2026.

The Chinese source text is available online at:

https://www.miit.gov.cn/gyhxxhb/jgsj/gxjss/wjfb/art/2026/art_0c6898addcbd489bbd5c9e4774ba554e.html
An archived version of the Chinese source text is available online at: https://perma.cc/QQQ4-2BA7.

Translation Date	**Translator**	**Editor**
July 2, 2026	Etcetera Language Group, Inc.	Ben Murphy, CSET Translation Manager

Notice of the General Office of the Ministry of Industry and Information Technology on Announcing the 2025 Annual List of High Technology Achievement Industrialization Pilot Projects for the National Key Research and Development Program

MIIT General Office High-Tech Letter [2026] No. 28 (工信厅高新函〔2026〕28号)

To the main oversight departments (主管部门) for industry and information technology and high technology of all provinces, autonomous regions, province-level municipalities, and the Xinjiang Production and Construction Corps:

To strengthen the role of high technology in supporting and guiding industry, and in accordance with the *Notice of the General Office of the Ministry of Industry and Information Technology on Carrying Out Pilot Work on High Technology Achievement Industrialization for the National Key Research and Development (R&D) Program*[1] (MIIT General Office High-Tech Letter [2025] No. 231) and relevant work requirements, the Ministry of Industry and Information Technology (MIIT), following procedures including independent applications by the respective work units (单位), selection and recommendation of the best candidates by local authorities, and expert review and evaluation, has determined 67 pilot achievements and 108 pilot units. The list is hereby announced (see the appendix for details).

The implementation period for this batch of pilot projects is two years from the date the list is announced. All pilot work units shall promptly improve their pilot implementation plans and, by February 28, 2026, submit them for filing through the Information Service Platform for the Industrialization of High-Tech Achievements (sd.miitip.com). Pilot work shall be advanced in a solid manner in accordance with the pilot implementation plans. Centering on the industrialization of the pilot achievements, pilot work units shall establish work coordination mechanisms, implement resource support measures, and innovate methods and measures, so as to effectively promote the conversion of a group of National Key R&D Program achievements into tangible (实实在在) productive forces (生产力) and ensure that the pilot objectives are achieved on schedule.

Provincial-level main oversight departments in all localities shall increase policy support for pilot work units, strengthen follow-up management of the pilot work, help coordinate and resolve relevant issues, promptly summarize work progress, lessons learned, and best practices, and organize the submission of each pilot work unit's annual work summary through the Information Service Platform by December 15 each year. After the pilot period expires, MIIT will organize an assessment and evaluation.

[1] Translator's note: The National Key Research and Development Program (National Key R&D Program; 国家重点研发计划) is China's major overarching plan to advance basic and applied research in strategic technologies. It replaced both the National High-tech R&D Program (国家高技术研究发展计划; better known as the 863 Program [863计划]) and the National Key Basic Research and Development Program (国家重点基础研究发展计划; better known as the 973 Program [973计划]) in 2016.

Appendix

2025 Annual List of High Technology Achievement Industrialization Pilot Projects for the National Key Research and Development Program

Pilot Achievements

No.	Achievement Name	Affiliated Work Unit
High-End Functional and Intelligent Materials		
1	Ultra-High Energy Storage Density Dielectric Materials and Devices	Tsinghua University
2	Data-Driven Design and Manufacturing of Copper Alloys for Integrated Circuit Lead Frames	University of Science and Technology Beijing
3	A High-Sensitivity Entropy-Regulated Amorphous Alloy Stress-Impedance Strain Gauge Suitable for Structural Seismic Resistance and Disaster Prevention	Nanjing University of Science & Technology
4	Precious Metal Reduction (减量) Technology for Selective Hydrogenation	Zhejiang University
5	Complete Technology for the Preparation of Liquid-Cooling Thermal Management Materials	Juhua Group Co., Ltd. (巨化集团有限公司)
6	Single-Phase Immersion Liquid-Cooling Solution for Data Centers	Juhua Group Co., Ltd.
7	Innovative Integration of New Electromagnetic Materials into Traction Motors for 450 km/h High-Speed Trains	National Innovation Center of High Speed Train (国家高速列车青岛技术创新中心)
8	Aviation Fuel Coalescence and Separation Device	South China University of Technology
9	Inorganic Two-Dimensional Material Membranes for Efficient Hydrogen Separation	South China University of Technology
Advanced Structural and Composite Materials		
10	Preparation Technology for Sound-Absorbing Honeycombs and Their Composite Materials	AVIC Manufacturing Technology Institute
11	Research and Development of Manufacturing and Complete Applied Technology for Wear-Resistant, Fatigue-Resistant, and Corrosion-Resistant	China Academy of Railway Sciences Corporation Limited

No.	Achievement Name	Affiliated Work Unit
	Rails and Frogs for the Sichuan-Tibet Railway	
12	Key Technologies for Maintaining the Long-Term Performance of Structural Concrete in the Complex Environments of the Sichuan-Tibet Railway	China Academy of Railway Sciences Corporation Limited
13	High-Performance Technology for Shotcrete in the Complex Environments of the Sichuan-Tibet Railway	China Academy of Railway Sciences Corporation Limited
14	Key Technologies for Improving the Crack Resistance of Structural Concrete in the Complex Environments of the Sichuan-Tibet Railway	China Academy of Railway Sciences Corporation Limited
15	Powder Preparation Technology for Recovery and Reuse of Coarse Superalloy Powder and its Application	AECC Beijing Institute of Aeronautical Materials
16	Large-Tonnage Carbon Fiber Composite Cable	University of Science and Technology Beijing
17	Multilayer Gradient Cold-Spray Repair and Nano Cemented Carbide Reinforced Composite Plating Technology for Continuous Casting Crystallizers	Ansteel Beijing Research Institute Co., Ltd.
18	R&D on Key Technologies and Application Development for Ultra-High-Stiffness Magnesium-Based Composite Materials	Harbin Institute of Technology
New Displays and Strategic Electronic Materials		
19	Sub-6GHz Gallium Nitride (GaN) Radio Frequency (RF) Devices	13th Research Institute of China Electronics Technology Group Corporation (CETC)
20	High-Frequency, High-Power Laser Modulator Technology	Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences (CAS)
New Rare Earth Materials		
21	Series Preparation Technology for High-Temperature-Resistant Cobalt-Based Permanent Magnet Materials	China Jiliang University
22	Key Technology for Heavy Rare Earth-Free, High-Coercivity Sintered Neodymium (NdFeB)	Ningbo Institute of Materials Technology & Engineering, CAS
High-Performance Manufacturing Technology and Major Equipment		

No.	Achievement Name	Affiliated Work Unit
23	6-Inch Semi-Insulating SiC Crystal Growth Furnaces and 6/8-Inch-Compatible SiC Epitaxial Furnaces	Beijing NAURA Microelectronic Equipment Co., Ltd.
24	New Metal-Organic Chemical Vapor Deposition (MOCVD) Equipment for Micro-LEDs	Advanced Micro-Fabrication Equipment Inc. China (AMEC)
25	Precision Forming Technology for Large Thin-Walled Aluminum Alloy Complete Cylindrical Sections for Spacecraft	Shanghai Spaceflight Precision Machinery Institute
26	High-Temperature-Resistant and Corrosion-Resistant Bearings for Transmission Systems	Luoyang Bearing Group Co., Ltd.
27	High-Performance Sealing Elements for Aviation Hydraulic Systems	Guangzhou Mechanical Engineering Research Institute Co., Ltd.
28	Key Manufacturing Technology for Ultra-Large Seamless Titanium Cathode Drums	Xi'an Taijin New Energy Technology Co., Ltd.
Intelligent Sensors		
29	Advanced Sensors and Core Components for Spacecraft Control Systems, and their Manufacturing Processes	Beijing Institute of Control Engineering
30	Flexible Intracranial Implantable Multimodal Integrated Sensing and Regulation Technology System for Intracranial Multiparameter Detection	Aerospace Information Research Institute, Chinese Academy of Sciences
31	Key Self-Powering Technology for Human Health Monitoring Sensors	Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences
32	High-Sensitivity Micro-Electro-Mechanical System (MEMS) Magnetic Sensing Components and Sensors	State Grid Smart Grid Research Institute Co., Ltd.
33	Miniature High-Performance Accelerometers	Beijing Aerospace Xinghua Technology Co., Ltd.
34	Rocket Sensors	Aerospace Long March Launch Vehicle Technology Co., Ltd.
35	New Broadband Triaxial Accelerometer with Nanogram (ng)-Level Resolution	Tianjin SIASUN Robot & Automation Co., Ltd.
36	Automotive-Grade High-Precision Integrated Navigation Sensors	Hebei MT Microsystems Co., Ltd.
37	A Series of Sensors for Deep-Sea	Shenyang Institute of Automation,

No.	Achievement Name	Affiliated Work Unit
	Environmental Observation and Resource Exploration	Chinese Academy of Sciences
38	Multiparameter Differential Pressure Flow Meters	Microcyber Corporation
39	Quantitative Model of Sensing Interfaces Based on Resonant Cantilever Beams and Quantitative Analytical Instrument Technology	Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences
40	High-Performance X-Ray Sensors	iRay Electronic Technology Group Co., Ltd.
41	Electromagnetic Sensors	SIM United Superconducting Technology Co., Ltd.
42	A Thin-Film Getter Structure With a Microheater and Its Manufacturing Method	Shanghai Industrial Technology Research Institute Co., Ltd. (SITRI)
43	High-Performance Sound-Sensitive Components and Sensors	Wuxi WillMEMS Semiconductor Co., Ltd. (无锡韦感半导体有限公司)
44	New High-Performance MEMS Gas Sensors	SuZhou Huiwen Nano S&T Co., Ltd.
45	MEMS Sensor Batch Manufacturing Platform	United Nova Technology Co., Ltd.
46	Development and Application of Diamond Quantum Magnetic Sensors	University of Science and Technology of China
47	In Situ Continuous Temperature Measurement Sensors and Measurement Systems for Molten Steel	Maanshan Iron & Steel Company Limited
48	High-Performance Laser Gas Sensing Components	Shandong SciTech Innovation Group Co., Ltd.
49	Key Technologies and Applications of Sensitive Components for Biosensors	Shandong Kanghua Biotechnology Co., Ltd.
50	Polymer-Derived Ceramic Metamaterial Wireless Passive Temperature Sensors	Zhengzhou University
51	High-Precision Inkjet Printing Technology and Equipment for Ultrafine Fiber Surfaces	Huazhong University of Science and Technology
52	Complete Sensor Sets for High-Speed Rail Vehicle Health Monitoring Systems	CRRC Zhuzhou Institute Co., Ltd.
53	Automotive-Grade Solid-State LiDAR for Industrialized Mass Production for Autonomous Driving	RoboSense Technology Co., Ltd.
54	Integrated Sensing and Computing Room-Temperature Infrared Imaging	Chongqing Institute of Green and Intelligent Technology, Chinese

No.	Achievement Name	Affiliated Work Unit
	Detection Technology	Academy of Sciences
55	Optical Grating Sensors for Nanoscale-Precision Displacement Measurement	Xi'an Jiaotong University
56	Distributed Thin-Film Sensors for Highway Infrastructure	Zhonghang Electronic Measuring Instruments (Xi'an) Co., Ltd.
Industrial Software		
57	Core Components of an Industrial Internet Operating System for Discrete Industries (离散行业)	Beijing Institute of Technology
58	Data-Driven Closed-Loop Performance Analysis, Regulation, and Optimization Technologies and Software for Manufacturing Processes	University of Science and Technology Beijing
59	Industrial Data Intelligent Analysis and Decision-Making System for the Entire Discrete Manufacturing (离散制造) Process	Beijing University of Aeronautics and Astronautics (Beihang University)
60	Apache IoTDB Distributed Time-Series Data Management System	Tsinghua University
61	Basic Theory and Methods for Multi-access Edge Computing (MEC)-Based Edge Control and Real-Time Simulation	Shenyang Institute of Automation, Chinese Academy of Sciences
62	Cloud Architecture-Based Service-Oriented Manufacturing Execution System (MES) and Intelligent Management and Control Platform System	Beijing Xiaomi Mobile Software Co., Ltd.
63	Domestically Produced Isogeometric Analysis Software ADIGA	Dalian University of Technology
64	Industrial Interconnection Platform for Distributed Factories	COMAC Shanghai Aircraft Manufacturing Co., Ltd.
65	Industrial Interconnection Platform for the Personalized Customization Industry	Guangzhou MINO Automotive Equipment Co., Ltd.[2]
66	Integrated Terminal-Edge-Cloud Interconnection Technology and System for IT/OT Convergence	Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
67	Industrial Interconnection Platform for the Large-Scale Manufacturing Industry	Gree Electric Appliances, Inc. of Zhuhai

[2] Translator's note: Guangzhou MINO Automotive Equipment Co., Ltd. (广州明珞装备股份有限公司) is now known simply as Guangzhou MINO Co., Ltd. (广州明珞股份有限公司).