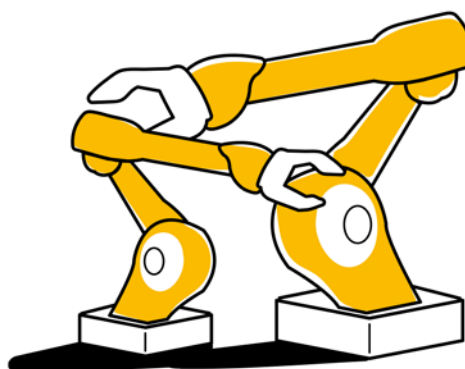


MAY 4, 2021 (REPORTING PERIOD: APRIL 1 - 30)

MERICS China Industries Briefing

ALEXANDER BROWN, CAROLINE MEINHARDT, GREGOR SEBASTIAN



CONTENTS

MERICS TOP 5	2
1. Smart manufacturing plan seeks to overcome reliance on imports	2
2. China pledges further market opening in Hainan Free Trade Port	3
3. Battery storage capacity set for massive boost to facilitate renewables roll-out	4
4. Competition in China's highly fragmented electric vehicle market heats up further	5
5. Research report provides sobering assessment of China's aerospace and aviation industries	6
WORTH NOTING	7
Policy news	7
Corporate news	7

MERICCS TOP 5

1. SMART MANUFACTURING PLAN SEEKS TO OVERCOME RELIANCE ON IMPORTS

Policy name: 14th Five-Year Smart Manufacturing Development Plan (Draft for Comments) (“十四五” 智能制造发展规划 (征求意见稿)) ([Link](#))

Issuing body: MIIT

Date: April 14, 2021

At a glance: The Ministry of Industry and Information Technology (MIIT) released a draft smart manufacturing development plan to guide the country’s industrial upgrading through 2025. It aims to improve the quality and efficiency of manufacturing whilst reducing resource and energy consumption. Key goals for the next five years include:

- Increase domestically produced supply to 70 percent of equipment demand and 50 percent of software demand for smart manufacturing purposes; develop internationally competitive smart manufacturing equipment and software
- Achieve breakthroughs in 18 core technologies with intellectual property rights in areas such as design simulation, hybrid modeling, additive manufacturing and human-machine collaboration
- Ensure that over half of manufacturers have progressed beyond the initial planning stage of their smart manufacturing capabilities

MERICCS comment: This is one of the first sectoral five-year plan (FYP) drafts released following last month’s overall [14th FYP](#), which prominently featured smart manufacturing as a key driver of China’s strategy to become a ‘manufacturing superpower’ (制造强国).

The requirement to source smart manufacturing inputs locally will pressure foreign firms to shift production to China, thus enhancing supply chain security for Chinese companies. In line with the [13th FYP for smart manufacturing](#), the domestic supply of smart manufacturing equipment reached over 50 percent by 2020, yet China still sources the bulk of software from overseas.

Whilst the level of smart manufacturing capabilities in Chinese factories remains rather low, their upgrading is picking up speed. A January [MIIT report](#) found that the share of companies ranked at a more advanced stage (levels 3 to 5 – the highest level) jumped from 3 to 11 percent between 2019 and 2020. The automotive sector ranked as most advanced in its capabilities, an indication that sectors with significant foreign investment are leading the shift towards a highly automated and integrated industry.

2. CHINA PLEDGES FURTHER MARKET OPENING IN HAINAN FREE TRADE PORT

Policy name: Opinions on Special Measures to Support Market Access Liberalization of the Hainan Free Trade Port (关于支持海南自由贸易港建设放宽市场准入若干特别措施的意见) ([Link](#))

Issuing bodies: NDRC, MOFCOM

Date: April 8, 2021

At a glance: The National Development and Reform Commission (NDRC) and the Ministry of Commerce (MOFCOM) issued measures to widen market access in the Hainan Free Trade Port (FTP). Notable measures include:

- *Healthcare:* Encourage domestic and foreign firms to develop pharmaceuticals and support the local production of innovative high-end medical equipment
- *Financial services:* Support the development of securities, insurance, funds and other financial institutions in Hainan to optimize financial sector market access
- *Automotive:* Support the construction of charging and battery swapping facilities for new energy vehicles and promote the application of autonomous driving tech
- *Aerospace:* Widen market access in the commercial aerospace and civil aviation sectors, supporting international cooperation in tech R&D and encourage the application of new tech like 5G in airport security

Additionally, MOFCOM led the release of [28 further measures](#) to liberalize and facilitate trade in goods and services, including tech and digital services, in the FTP.

MERICS comment: The policy document is the latest effort to establish Hainan as a globally influential FTP. First proposed in 2018 and formally launched in June 2020 with the release of a [masterplan](#), Hainan is China's largest free trade area. Nearly a year on, authorities are opening the region even further to foreign investment, encouraging [overseas financial institutions to settle in Hainan](#) and promising a further [reduction of the negative list](#).

On paper, Hainan is China's most open free trade area with the [shortest negative list](#) for foreign investment: Foreign players face no restrictions in the automotive sector and fewer shareholding limits in telecommunications. The government is already touting its success, citing the creation of [1,005 foreign firms](#) in 2020. However, openness alone does not guarantee success. Despite extensive foreign investment, Shanghai's Pilot Free Trade Zone, for example, did not live up to its initial hype and even [drove away businesses](#) with tight capital controls.

Crucially, the FTP proclaims itself to be the "[intersection point](#)" of the two circles of China's dual circulation strategy. A key goal of attracting foreign know-how and talent is to upgrade Chinese companies' manufacturing capabilities and the quality of Hainanese exports, especially in high-tech sectors. Ultimately, foreign firms are welcome so long as they help Chinese companies become more competitive.

3. BATTERY STORAGE CAPACITY SET FOR MASSIVE BOOST TO FACILITATE RENEWABLES ROLL-OUT

Policy name: Guiding Opinions on Speeding up New Types of Energy Storage Deployment (Draft for Comments) (国家发展改革委 国家能源局关于加快推动新型储能发展的指导意见（征求意见稿）) ([Link](#))

Issuing bodies: NDRC, NEA

Date: April 21, 2021

At a glance: The NDRC and National Energy Administration (NEA) released a draft on new guidance for the energy storage sector. The document specifically promotes the development of electrochemical energy storage, i.e., battery storage, whilst excluding pumped hydropower. It sets key goals to achieve by 2025, including:

- Reach 30 GW of installed electrochemical energy storage capacity
- Develop low-cost, highly reliable and long-duration forms of electrochemical energy storage
- Upgrade indigenous capabilities in battery storage core technology and equipment

MERICS comment: Under the terms of the draft, China's battery energy storage is set for a ninefold increase over the next five years. The focus on electrochemical energy storage shows the government is intent on accelerating a trend away from pumped hydro, which accounts for most of China's current storage capacity. Battery storage covers a mere [9 percent of capacity](#), as high cost and reliability issues have previously limited investment. [Performance improvements](#) in the last year have given the government more confidence in the technology.

The additional battery storage will help resolve intermittency issues associated with wind and solar power, which has caused low utilization rates despite their large capacity. [Installed power generation capacity](#) from renewables is expected to increase to over half of China's total power generation capacity by 2025.

China's battery manufacturers stand to benefit from the push to enhance domestic production capabilities and will likely gain an advantage over [foreign competitors](#) such as LG Chem and Tesla. Their dominant position in the domestic market will empower them to make further investments in factories overseas, as [CATL](#) and [Svolt](#) have done in Germany.

4. COMPETITION IN CHINA'S HIGHLY FRAGMENTED ELECTRIC VEHICLE MARKET HEATS UP FURTHER

At a glance: This month saw a series of high-profile announcements by Chinese tech giants that are entering the electric vehicle (EV) sector. These add to a wave of EV and smart car investments by established domestic and foreign manufacturers in China. Noteworthy developments include:

- *April 7:* Xiaomi sets up a [working group with Wuhan officials](#) to discuss cooperation on EV manufacturing, having recently [announced](#) plans to invest USD 10 billion to develop smart EVs
- *April 19:* Alibaba's EV joint venture (JV) with SAIC, Zhiji Auto, debuts its first smart EV, the [IM L7](#), at the Shanghai auto fair
- *April 23:* Baidu's EV JV with Geely, Jidu Auto, announces it aims to invest [CNY 50 billion](#) over the next five years to develop smart EVs
- *April 27:* Qihoo 360, a Chinese Internet security firm, is reportedly considering investing in [EV brand Nezha](#)

MERICs comment: China has firmly established itself as the lead market for EVs and intends to further cement its position. In 2020, EVs accounted for only [5.2 percent](#) of automotive sales in China, but government ambitions – outlined in last year's [15-year new energy vehicle plan](#) – aim at a market share of 20 percent or 5 million units annually by 2025. Indeed, despite chip shortages, EVs achieved [record sales](#) in the last six months in China.

Consequently, tech giants from electronics company [Xiaomi](#) to ride-hailing firm [Didi](#) are rushing to enter this promising yet deeply fragmented market – with [89 existing producers](#) and counting, market consolidation is yet to come. Apart from directly manufacturing EVs, some firms are capitalizing on other opportunities in the industry chain of auto-related technologies and services. Drone maker [DJI's new automotive unit](#) is offering autonomous driving solutions and [Huawei plans to invest](#) more than USD 1 billion in self-driving and electric car component development.

For European carmakers that means competition will heat up not only in China, but also in third markets, including at home in Europe where [Chinese EV startups are making inroads](#). Many of them, like Volkswagen or BMW, are already [closely collaborating with Chinese tech giants](#) to advance autonomous driving capabilities or develop new software. Now, these tech firms, with their extensive data, could evolve into competitors and service providers for European companies.

5. RESEARCH REPORT PROVIDES SOBERING ASSESSMENT OF CHINA'S AEROSPACE AND AVIATION INDUSTRIES

Article name: Research Report on 26 Specialized Industrial Parks: How the Aerospace and Aviation Industries Energize Shanghai Manufacturing (26 特色园区跟踪调研 | 中期成果 航空航天如何赋能上海制造) ([Link](#))

Issuing bodies: Think Tank of ThePaper.cn, Shanghai Development Strategy Research Institute

Date: April 14, 2021

At a glance: Two think tanks with ties to Shanghai's municipal government published a report series that explores the state of industrial innovation and upgrading in Shanghai's 26 specialized industrial parks. An article presenting the key results provided a critical assessment of the current state of China's aerospace and aviation industries and Shanghai's role in them. The main conclusions include:

- Thanks to strong government support, China now holds the third-largest market share (7 percent) of the global aerospace and aviation manufacturing industry
- Shanghai's aerospace and aviation industries largely remain at the low-end of the industrial chain due to weak capabilities in key technologies, e.g., engines, airborne equipment and new composite materials
- R&D in the sectors suffers from a disconnect between state-owned firms and research institutions, and an insufficient level of military-civil integration

MERICS comment: As the home of the Commercial Aircraft Corporation of China (COMAC) and three specialized industrial parks focused on aviation and aerospace, Shanghai sits at the heart of China's commercial aviation industry. The report is a sobering and timely reminder that despite [decades of efforts](#) to develop a strong domestic commercial aircraft industry with state support, China's manufacturing capabilities in the sector are stuck at the low-end. In key tech and equipment, Chinese manufacturers like COMAC still rely on foreign providers. The report also claims that local supply chains have become more prone to risk with American and European manufacturers moving some production back home during the pandemic.

In line with the "Made in China 2025" initiative, making breakthroughs in these core aircraft components and materials will remain a key focus in the next five years – not just at the national but also at the regional level. Shanghai's industrial park complex aims to attract frontier R&D centers, innovative enterprises and world-class talent. Suzhou also recently announced [subsidies](#) to promote the development of the local aviation and space industry. Yet the announcement of new [tax exemptions](#) for the import of aviation equipment that cannot be produced domestically shows that Chinese manufacturers still have a long way to go and foreign companies will continue to play an important role.

WORTH NOTING

POLICY NEWS

- *April 1:* The Ministry of Science and Technology (MOST) and five other ministries issue a plan for the construction of the Yangtze River Delta G60 S&T Innovation Valley ([MOST notice \(CN\)](#))
- *April 1:* MOFCOM and eight other government entities issue a notice on establishing demonstration cities and enterprises for innovation in supply chain security and stability ([MOFCOM notice \(CN\)](#))
- *April 7:* The China Development Bank announces a special loan program that will offer CNY 300 billion for innovation and research over the next five years ([Sina article \(CN\)](#); [Xinhua article \(EN\)](#))
- *April 19:* The NDRC establishes a special central government fund for direct investments in the Greater Bay Area and Yangtze River Delta, focusing on S&T innovation platforms and environmental protection projects ([NDRC notice \(CN\)](#); [Caixin article \(EN\)](#))
- *April 20:* The Ministry of Finance (MOF) and two other government bodies announce the cancelation of import taxes for S&T related equipment and publications during the next five years ([MOF notice \(CN\)](#); [Caixin article \(EN\)](#))
- *April 20:* China launches a national “Future Internet Test Infrastructure,” the world’s largest internet test facility network which connects 40 of China’s top research universities ([State Council article \(CN\)](#); [SCMP article \(EN\)](#))
- *April 22:* Tsinghua University announces the establishment of a School of Integrated Circuits, China’s first school to offer a major in IC and dedicate itself to related research ([Tsinghua article \(CN\)](#); [Global Times article \(EN\)](#))
- *April 26:* The State Council issues a guideline for the establishment and improvement of a mechanism to realize the value of ecological products ([State Council notice \(CN\)](#); [State Council article \(EN\)](#))
- *April 27:* Premier Li Keqiang announces the introduction of new steps to improve IP rights governance such as reducing the time needed to review trademarks and patents ([State Council article \(CN\)](#); [State Council article \(EN\)](#))

CORPORATE NEWS

- *April 1:* Huawei reports an 11.2 percent revenue decline in Q4 of 2020, mainly due to the impact of US sanctions ([WSJ article \(EN\)](#))
- *April 3:* A Financial Times analysis reveals that a record 76 companies suspended their IPO applications in March 2021, likely in response to the pulling of Ant Group’s listing in 2020 ([Financial Times article \(EN\)](#))

- *April 9:* Chinese electronics maker Wingtech announces plans to invest CNY 12 billion in the construction of an EV semiconductor plant in Shanghai with Nexperia – a Dutch chip firm it acquired in 2019 ([Asia Nikkei article \(EN\)](#))
- *April 10:* The State Administration of Market Regulation (SAMR) fines Alibaba Group a record CNY 18.2 billion for violating antitrust laws ([SAMR announcement \(CN\)](#); [Xinhua article \(EN\)](#))
- *April 14:* French drugmaker Sanofi opens its first global research institute in China (Suzhou) to develop innovative drugs ([Yicai article EN](#))
- *April 15:* Chinese chip designer Longsoon unveils a new generation, self-developed computer instruction set, which it claims provides complete independence from technology developed abroad ([Technode article \(EN\)](#))
- *April 23:* Chinese AI chip developer Horizon Robotics announces it will set up a smart vehicle JV with German auto-parts maker Continental AG in China ([Horizon Robotics announcement \(CN\)](#); [Caixin article \(EN\)](#))
- *April 26:* Taiwan Semiconductor Manufacturing Company (TSMC) says it will invest USD 2.8 billion in new production lines at its Nanjing plant to ramp up auto chip production ([Asia Nikkei article \(EN\)](#))
- *April 26:* SAMR announces the start of an anti-monopoly investigation into Meituan ([SAMR notice \(CN\)](#); [Bloomberg article \(EN\)](#))

AUTHORS

Alexander Brown
Analyst, MERICS

Caroline Meinhardt
Analyst, MERICS

Gregor Sebastian
Junior Analyst, MERICS

EDITORIAL STAFF

Claudia Wessling
Director Communications
and Publications, MERICS

Fiona Bewley
Executive Team Assistant, MERICS

For more information, please contact
publications@merics.de.

PUBLISHER

MERICS | Mercator Institute for China Studies

Klosterstraße 64

10179 Berlin

Tel.: +49 30 3440 999 0

Mail: info@merics.de

www.merics.org