



THE US-CHINA BUSINESS COUNCIL

美中贸易全国委员会

Unofficial USCBC Chart of Localization Targets by Sector Set in the [MIIT Made in China 2025 Key Technology Roadmap](#)

The following chart is a broad overview of the domestic production localization targets set forth in the Made in China 2025 Key Technology Roadmap.

All targets are understood to mean domestic production by local Chinese entities, unless otherwise stated.

Sector	Localization Target
New Information and Communications Technology (ICT) Industry	
Integrated Circuits	<p>By 2020, the average profits for the industry should increase by over 20 percent. Domestic technologies should reach a leading international level in internet communication, cloud computing, the internet of things, and other areas. Key equipment materials should be included in the international procurement system, and an advanced, “secure and reliable” industrial system of integrated circuits should be established.</p> <p>By 2030, main sectors in the integrated circuits industrial chain should reach a leading international level, with a concentration of Chinese companies at the helm of rapid development.</p>
ICT Equipment	<p>Wireless Mobile Communication: By 2020, domestic ICT equipment, terminals, and chips should respectively capture 75 percent, 75 percent and 35 percent of the domestic market, and 35 percent, 25 percent, and 15 percent of the international market.</p> <p>By 2025, domestic ICT equipment, terminals, and chips should respectively capture 80 percent, 80 percent, and 40 percent of the domestic market, and 40 percent, 45 percent, and 20 percent of the international market.</p> <p>New Generation Network: By 2020, domestic fiber optic communication equipment should capture 50 percent of the international market. Of this, domestic routers and switches should capture 20 percent of the international market.</p> <p>By 2025, domestic fiber optic communication equipment should capture 60 percent of the international market. Of this, domestic routers and switches should capture 25 percent of the international market.</p>

	<p>High-performance Computer and Server: By 2020, domestic high-performance computers and servers should capture 60 percent of the domestic market and 30 percent of the international market. Differences in quality between Chinese and international high-end server products should be reduced and be applied in the fields of domestic finance, ICT and smart city development.</p> <p>By 2025, domestic high-performance computers and servers should capture 40 percent of the international market, and capture more than 80 percent of the domestic market. Within this 80 percentage figure, Chinese produced high-end servers should capture 50 percent of the market. The procurement of domestically produced CPU brand servers should be higher than 30 percent.</p>
<p>Operating System and Industrial Software</p>	<p>By 2020, an indigenous “cloud” and “terminal” industrial big data platform should reach a penetration rate of over 40 percent in key industries.</p> <p>By 2025, there should be breakthroughs achieved in the majority of “key technologies,” and an indigenous and controllable operating system and industrial software and standards system should be formulated. Indigenous software should capture over 50 percent of the domestic market, while Internet Plus Smart Industrial Clouds should have a penetration rate of over 60 percent in key industries.</p>
<p>Intelligent Manufacturing Core Information Equipment</p>	<p>By 2020, domestic intelligent manufacturing products – which include smart infrastructure information equipment, industrial control equipment, industrial sensors, manufacturing network equipment, industrial information safety products, etc. – should capture 40 percent of the domestic market, while at least five homegrown companies that earn over 10 billion RMB should be developed.</p> <p>By 2025, an indigenous and controllable, a safe and reliable intelligent manufacturing core information equipment production environment and new technology system should be developed, with related domestic products occupying a leading position in the domestic market. These products should capture 60 percent of the domestic market, and be of advanced international quality.</p>
<p>Advanced Numerical Control Machine Tools and Robotics</p>	
<p>Advanced Numerical Control Machine Tools and Basic Manufacturing Equipment</p>	<p>By 2020, domestic advanced numerical control machine tools and basic manufacturing equipment should capture more than 70 percent of the domestic market. Standardized and smart numerical control systems should capture 60 percent and 10</p>

	<p>percent of the domestic market respectively. Middle- and high-end functional assembly parts should capture 50 percent of the domestic market.</p> <p>By 2025, standardized and smart numerical control systems should capture over 80 percent and 30 percent of the domestic market respectively. Middle-and-high-end functional assembly parts should capture 80 percent of the domestic market.</p>
Robotics	<p>By 2020, indigenous industrial robots should capture 50 percent of the domestic market, with domestically produced critical components capturing 50 percent of the domestic market. Application should be in eldercare, recovery, and other social services, including rescue relief. Two to three leading companies should be cultivated, and five to eight robot supplementary production clusters should be constructed.</p> <p>By 2025, the robotics production system should be perfected, with research and manufacturing capabilities achieving a high international level of advancement. Indigenous industrial robots should capture 70 percent of the domestic market, and the technology for main components should be at a comparable international standard.</p>
Aerospace	
Airplanes	<p>By 2020, the annual revenue of domestic civil airlines should exceed 100 billion RMB. Domestic trunk line airplane delivery should capture 5 percent of the domestic market; regional turbo-prop delivery should take up 5 to 10 percent of the global market; general-purpose planes and helicopter delivery should capture 20 percent and 10 percent of the global market respectively.</p> <p>By 2025, the annual revenue of domestic civil airlines should exceed 200 billion RMB. Domestic trunk line airplane delivery should capture over 10 percent of the domestic market; regional turbo-prop delivery should capture 10 to 20 percent of the global market; general-purpose planes and helicopter delivery should capture 40 percent and 15 percent of the global market respectively.</p>
Aircraft Engines	<p>By 2020, the CJ-1000A turbofan jet engine model should be completed. By 2025, the CJ-1000A turbofan jet engine should be prepared for commercial use.</p>
Airborne Equipment and System	<p>By 2020, the initial “system, equipment, and devices” system should be established as part of the “airborne equipment and systems” supporting system. Supply chains that utilize long term, stable, and high-quality and reliable aviation materials should be established by the same year.</p>

	<p>By 2025, domestically produced regional aircraft components should capture 30 percent of the market share, while general-purpose aircraft components should capture 50 percent.</p>
Aerospace Equipment	<p>By 2020, China should establish a national civil space infrastructure with main functions completed in order to adopt various operational needs, complete manned space flight missions and “three steps missions” for the Chinese Lunar Exploration Program, achieve security with at least 60% of indigenous space information application, and establish relatively sound satellite and application supply chains.</p> <p>By 2025, China should establish space transportation architecture with high efficiency, safety and adaptability, and a highly efficiently operated national civil space infrastructure with services as well as interplanetary exploration abilities, and achieve at least 80 percent of indigenous space information application.</p>
Ocean Engineering Equipment and High-Tec Ships	
Ocean Engineering Equipment and High-Tech Ships	<p>By 2020, China should become a leader in ship manufacturing, high-tech ship manufacturing, and oceanic engineering equipment. Domestically designed oceanic engineering equipment and high-tech ships should capture 35 and 40 percent of the international market, respectively. Domestically produced critical systems and equipment should compose 40 percent and 60 percent of oceanic engineering equipment and high-tech ships, respectively.</p> <p>By 2025, domestically researched, designed, and constructed main components of oceanic engineering equipment and high-tech ships should capture 40 and 50 percent of the international market, respectively. Domestically produced critical systems and equipment should comprise 50 percent and 80 percent of oceanic engineering equipment and high-tech ships, respectively.</p>
Advanced Rail Transit Equipment	
Advanced Rail Transit Equipment	<p>By 2020, research on domestic rail equipment and main rail components should reach a leading international level, with an industrial sales value exceeding 650 billion RMB. The percentage of overseas business should exceed 30 percent, while the percentage of the related services industry should exceed 15 percent, with “key rail products” entering US and European markets.</p> <p>By 2025, the rail equipment manufacturing industry should be perfected. Major products should be at an international level</p>

	<p>of quality, and the percentage of overseas business should be at 40 percent, with the related services industry exceeding 20 percent. China should lead in international standards setting, and create a modern rail equipment production system, occupying the higher end of the global production chain.</p>
Energy Saving and Smart Vehicles	
Energy Saving Vehicles	<p>By 2020, domestic products should capture 40 percent of the domestic market; domestic production of key components for commercially used new-fuel consumption vehicles should exceed 70 percent in the market; and domestic production of passenger cars that have average oil consumption greater than 5L/100km should exceed 50 percent of the market. Of the top 10 brands famous for sales of energy-saving vehicles, five should be local companies.</p> <p>By 2025, an indigenous and controllable energy saving vehicle production chain should be established, with domestic products capturing 50 percent of the market; domestic production of key components for commercially used new-fuel consumption vehicles should exceed 80 percent of the domestic market; and domestic production of passenger cars that have average oil consumption greater than 4L/100km should capture more than 60 percent of the market. Of the top five brands famous for sales of energy saving vehicles, three should be local champions. The reputation of indigenous products should be greater than those of joint-venture brands, with indigenous critical components capturing 60 percent of the market. 20 percent of world-class energy saving commercially used vehicles should be exported from China.</p>
New Energy Vehicles (NEVs)	<p>By 2020, indigenous NEVs should capture 70 percent of the market; “star models” should be created with the goal of ranking among the top 10 most-sold NEV models globally. Power batteries, driving motors, and other components should reach an advanced international level of quality and capture 80 percent of the domestic market.</p> <p>By 2025, an indigenous and controllable production chain should be completed, with indigenous NEVs capturing over 80 percent of the domestic market. Of the top 10 global NEV producing companies, two should be homegrown with overseas sales occupying 10 percent of their total sales.</p>
Intelligent Vehicles	<p>By 2020, domestic automobile information products should capture 50 percent of the market. Domestic products for smart city transportation infrastructure should capture over 80 percent of the market.</p>

	By 2025, domestic vehicle information technology products should capture 60 percent of the market, and of the top ten smart vehicle production companies globally, one should be homegrown.
Electricity Equipment	
Power Generating Equipment	<p>By 2020, domestically produced power generating equipment should occupy 90 percent of the domestic market, with exports accounting for 30 percent of annual output.</p> <p>By 2025, three homegrown international enterprise groups should be created with the proper financing, scale, technology, quality, branding, and competitive edge. New and renewable energy equipment and energy saving equipment should capture over 80 percent of the market.</p>
Electricity Transmission and Transformation Equipment	<p>By 2020, total output should surpass 2.2 trillion RMB. Domestic key assembly parts should capture 80 percent of the market with over 20 percent of products for exports.</p> <p>By 2025, total output should reach over 3 trillion RMB. Domestic key assembly parts should capture 90% of the market with over 25 percent of products for export.</p>
Agriculture Equipment	
Agriculture Equipment	<p>By 2020, domestically produced agricultural equipment products should exceed 90 percent of the market. Domestic tractors, cotton picking machines, and other high end equipment that is 200 HP and above should capture 30 percent of the market.</p> <p>By 2025, domestically produced agricultural equipment products should exceed 95 percent of the market. Domestic tractors, cotton picking machines and other high end equipment should capture 60 percent of the market.</p>
New Materials	
Advanced Basic Materials <i>(Includes steel, nonferrous materials, building materials, light industry materials, textile materials, etc.)</i>	By 2025, the industrial structure should be significantly adjusted, and the basic material production structure should be upgraded, and should exceed 90 percent of the domestic market.
Essential Strategic Materials <i>(Includes high-end equipment with special alloy, high-performance separation membrane materials, high-performance fiber and related composite materials, new energy materials,</i>	By 2020, China should realize more than 30 demonstration projects for essential strategic material industrialization and application. Domestically produced essential strategic materials should capture over 70 percent of the domestic market.

<p><i>electronic ceramics and artificial crystals, biomedical materials, rare earth materials, advanced semiconductor materials, and materials related to the advancement of the strategic emerging industries)</i></p>	<p>By 2025, the issue of providing strategic essential materials for key industries should be resolved. High-end manufacturing sectors should be fundamentally resolved and self-produced, and self-produced essential strategic materials should capture over 85 percent of the domestic market.</p>
<p>Cutting-Edge New Materials (Includes 3D printing materials, superconducting materials, intelligent bionic and metamaterials, etc.)</p>	<p>By 2020, a batch of new material patents should be accumulated, with a portion meant for mass production and application in key industries.</p> <p>By 2025, the layout for cutting edge new-material technology, standards, and patents should be achieved; cutting edge new materials should achieve breakthroughs in scale and application, with a portion of this technology reaching a leading international level of quality.</p>
<p>Biopharmaceuticals and High-performance Medical Equipment</p>	
<p>Biopharmaceuticals</p>	<p>By 2020, at least 100 companies should have their products certified under the World Health Organization and prepped for export to the USA, EU, and Japan. According to international pharmaceutical standards, 10 to 20 chemical medicines and their high-end preparations, three to five kinds of new Chinese medicinal products, and three to five new biotech pharmaceuticals should be registered in the US, EU, and other developed nations.</p> <p>Before 2020, generic production of more than 90 percent of international blockbuster drugs should be achieved before their patent expires.</p> <p>By 2025, the basic drug quality standards and system should be integrated internationally. Drugs that specifically address major diseases, Chinese medicine, and new biotech pharmaceuticals should be developed, with five to ten new, indigenous drugs should be passed by the FDA or receive EU certification and enter the international market place.</p>
<p>High-Performance Medical Equipment</p>	<p>By 2020, domestically produced middle and high-end medical equipment should capture 50 percent of the market for county-level hospitals. Domestically produced critical components should capture 60 percent of the domestic market, and at least three internationally recognized brands of high-performance medical equipment should be developed.</p> <p>By 2025, domestically produced middle and high-end medical equipment should capture 70 percent of the market for county-level hospitals. Domestically produced critical components should capture 80 percent of the domestic</p>

	market, and at least 5 internationally recognized brands of high-performance medical equipment should be developed.
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