



China: Catalogue of Industries for Guiding Foreign Investment (Revision 2017)

November 2018



ASIA BRIEFING



DEZAN SHIRA & ASSOCIATES

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No. 4 Decree of the National Development and Reform Commission and the Ministry of Commerce of the People's Republic of China

The Catalogue of Industries for Guiding Foreign Investment (Revision 2017), which has been approved by the Party Central Committee and the State Council, is hereby issued and shall come into force on July 28, 2017; while the Catalogue of Industries for Guiding Foreign Investment (Revision 2015) issued by the National Development and Reform Commission and the Ministry of Commerce on March 10, 2015 shall be repealed simultaneously.

Catalogue of Encouraged Industries for Foreign Investment

I. Agriculture, Forestry, Animal Husbandry and Fishery

1. Planting, development and production of woody plants that contain edible oil or are used as seasonings or industrial raw materials
2. Development of planting technologies for green food vegetables or organic vegetables (including edible fungi and melons), dried and fresh fruit, and tea, and relevant production
3. Development of new planting technologies for crops, such as sugar crops, fruit trees and pasture, and relevant production
4. Production of flowers and construction and operation of nurseries
5. Planting of rubber trees, oil palm, sisal and coffee
6. Planting or breeding of Chinese medicinal materials
7. Returning crop straw to farmland and the comprehensive utilization of crop straw; development and production of organic fertilizer resources
8. Breeding of aquatic fingerlings (excluding China's rare and endemic species)
9. Construction and operation of environment protection projects, such as the planting of trees and grass to combat desertification and soil erosion

10. Aqua farming, open sea-cage aquaculture, industrial aquaculture, and ecological mariculture

II. Mining Industry

11. Exploration and exploitation of oil and natural gas as well as utilization of mine gas
12. Improvement in enhanced oil recovery (in the form of engineering services) as well as development and application of related new technologies
13. Development and application of new technologies for oil exploration and exploitation in areas such as geophysical prospecting, drilling, well logging, mud logging, and down-hole operation
14. Development and application of new technologies for enhancing utilization rate of mine tailings and the comprehensive application of ecological restoration technology in mining areas
15. Exploration and exploitation of mines in short supply in China (such as mines of sylvite and chromite) and mineral separation

III. Manufacturing Industries

Agricultural and Side-line Food Processing

16. Development and production of safe, efficient and environment-friendly fodder and additives (containing methionine)
17. Aquatic product processing, shellfish purification and processing, and development of algal health food
18. Processing of vegetables, dried and fresh fruit, and livestock and poultry products

Food Manufacturing

19. Development and production of infant formula food, food for special medical purpose and health food
20. Processing of forest agricultural products
21. Development of new technologies for and production of natural food additives and natural perfume

Manufacturing of Wine, Beverage and Refined Tea

22. Development and production of fruit and vegetable drinks, protein drinks, tea drinks, coffee drinks, and botanical drinks
23. Textile Industry
24. Production of multifunctional industrial textiles that are lightweight, high/low-temperature resistant and chemical-resistant, with high performance and good light fastness, using non-woven, weaving, knitting or their composite techniques
25. Dyeing and after finishing processing of high-end textiles, using advanced energy conservation and emission reduction technologies and equipment
26. Processing of special natural fibres (including but not limited to cashmere and other special animal fibres, bamboo fibre and bastose, silk, and coloured cotton) that satisfy the ecological, comprehensive resource utilization and environmental protection requirements

Textile, Clothing and Apparel Sectors

27. Production of clothing by using computer integrated manufacturing system (CIMS)
28. Production of special-purpose functional clothing

Leathers, Furs, Feathers and Related Products and Shoemaking

29. Cleaning and processing of leathers and furs
30. Finishing of leather with new techniques
31. Multipurpose use of leather wastes

Wood Processing and Wood, Bamboo, Rattan, Palm Fiber, and Straw Products

32. Development of new technologies for the comprehensive utilization of three forest residues (logging residue, bucking residue and processing residue), "inferior quality lumbers, small-sized lumbers and firewood," and bamboo, and the development and production of relevant new products

Manufacturing of Supplies for Culture and Education, Industrial Arts, Sports and Entertainment

33. Production of high-end carpet, embroidery and drawn work

Petroleum Processing, Coking and Nuclear Fuel Processing

34. Processing of carbolic oil and absorber oil, high-end utilization of coal tar pitch (excluding modified pitch)

Manufacturing of Chemical Raw Materials and Chemical Products

35. Development and production of new downstream products of polyvinyl chloride (PVC) and organosilicon
36. Auxiliary raw materials for the production of synthetic materials: production of hydrogen peroxide-based propylene oxide, naphthalene dicarboxylate (NDC), -cyclohexanedimethanol (CHDM), butadiene adiponitrile and hexanediamine, with an annual production capacity of 0,000 tons or more.
37. Raw materials for the production of synthetic fibers: production of nylon 6 salt and, -propylene glycol
38. Synthetic rubber: production of polyurethane rubber, acrylate rubber, epichlorohydrin rubber, fluorine rubber, silicone rubber and other special rubbers
39. Engineering plastics and plastic alloys: production of non-phosgene polycarbonate (PC), homopolymerized polyoxymethylene (POM), polyphenylene sulfide, polyether-ether-ketone (PEEK), polyimide, polysulfone, polyether sulfone, polyarylate (PAR), polyphenylene sulfide and its modified materials as well as liquid crystal polymer, etc., with an annual production capacity of 0,000 tons or more
40. Fine chemicals: new catalyst products and technologies, processing technologies for the commercialization of dyes (pigments), production of electronic chemicals and papermaking chemicals, leather chemicals (excluding N-N-dimethylformamide), oilfield chemicals, surfactants, water treatment

chemicals, adhesives, inorganic fibers and Nano-materials, and deep processing of pigment encapsulation

41. Production of water-based ink, low-volatile ink for electron beam curing and UV-curing, and environment-friendly organic solvents
42. Production of natural spices, synthetic spices and single ion spices
43. Production of high-performance coatings, high solid, solvent less coatings, water-based industrial coatings, and auxiliary water-based resins
44. Production of high-performance fluorine and fluorine coating materials, medical intermediates containing fluorine, and environment-friendly fluorine-containing refrigerant, detergent and vesicant
45. Recovery of fluoride resources from the phosphorus chemical industry and aluminum smelting
46. Development of new technologies for forestry chemical products and development and production of relevant new products
47. Development and production of inorganic, organic and biological membranes for environmental protection purposes
48. Development and production of new types of fertilizers: high potassium fertilizers, compound microbial inoculants, compound microbial fertilizers, decomposition agents for straws and refuse, and other microbial formulations with special functions
49. Development and production of new varieties, new formulations, special-purpose intermediates, or auxiliary agents of high efficient, safe and environment-friendly agricultural chemicals, and development and application of relevant clean production process (process of ethylene-based acetochlor, aqueous phase chlorpyrifos, process of recovery of methyl chloride with glyphosate, production of chiral and stereospecific pesticides by oriented synthesis, and synthetic technique of diethyl thiophosphoryl chloride)
50. Development and production of biological agricultural chemicals and biological control products: microbial pesticides, microbial fungicides, agricultural antibiotics, insect

pheromones, natural enemies, and microbial herbicides

51. Comprehensive utilization, treatment and disposal of waste gas, liquid waste and waste residue
52. Production of organic polymer materials: aircraft skin coating, rare earth cerium sulphide red dyes, lead-free electronic packaging materials, lithographic slurry specifically for color plasma screens, microfibers with a small diameter and a large specific surface area, high-precision fuel filter paper, lithium-ion battery diaphragms, surface treatment self-healing materials and super-hydrophobic nano-coating materials

Pharmaceutical Industry

53. Production of new compound drugs or drugs with active ingredients (including drug substance and formulations)
54. Amino acids: production of tryptophan, histidine, methionine, etc. using the zymotechnics process
55. Development and production of new types of anticarcinogenic drugs, cardiovascular and cerebrovascular drugs, and nervous system drugs
56. Production of new types of drugs employing bioengineering and biotechnology
57. Production of HIV/AIDS vaccines, hepatitis C vaccines, contraceptive vaccines, and new types of vaccines for cervical carcinoma, malaria, "hand, foot and mouth" diseases, etc.
58. Development and production of marine drugs
59. Pharmaceutical formulations: production of new formulations and new products employing new technologies, such as slow release, controlled release, targeting, and percutaneous absorption
60. Development and production of new excipients
61. Production of special antibacterial drug substance for animals (including antibiotics and chemical synthesis API)
62. Production of new products and new formulations of antibacterial drugs,

anthelmintic, insecticides and anti-coccidiosis drugs for veterinary use

63. Development and production of new types of diagnostic reagents

Chemical Fiber Manufacturing

64. Production of high-tech chemical fibers (excluding viscose fibers), including but not limited to differential chemical fibers, aramid fibers, carbon fibers, high-performance/high modulus polyethylene fibers, and polyphenylene sulfide (PPS) fibers

65. Production of new types of polyester for fiber or non-fiber use: polytrimethylene terephthalate (PTT), polyethylene naphthalate (PEN), polycyclohexylenedimethylene terephthalate (PCT), and glycol-modified polyethylene terephthalate (PETG)

66. Production of biomass fibers by utilizing new types of renewable resources and environment-friendly process, including but not limited to new solvent spun cellulose fibers (Lyocell), regenerated cellulose fibers using bamboo, hemp, etc., poly lactic acid (PLA) fibers, chitin fiber, polyhydroxyalkanoates (PHA), and animal and plant protein fibers

67. Development and production of nylon1, nylon2, nylon414, nylon6, long carbon chain nylon, high temperature resistant nylon and other new types of polyamide

68. Production of aramid fibers and cords for radial tires

69. Rubber and Plastic Products

70. Development and production of new photo-ecological, multifunctional and wide-width agricultural films

71. Recycle and reutilization of plastic waste

72. Development of new soft plastic packaging technologies and production of new varieties of soft plastic packaging products (including high-barrier and multifunctional films and relevant raw materials)

Non-metallic Mineral Products

73. Development and production of building materials featuring energy conservation, environmental protection, waste recycling,

light-weight, high-strength, high performance and multiple functions

74. Production of energy-saving and high-efficiency chemical building materials using plastic to replace steel or wood

75. Production of SBS/APP modified bitumen waterproof rolls with an annual output of 0 million square meters or more; wide (two meters or more) ethylene propylene diene monomer (EPDM) rubber waterproof rolls and relevant auxiliary materials; wide (two meters or more) polyvinyl chloride (PVC) waterproof rolls; and thermoplastic polyolefin (TPO) waterproof rolls

76. Development and production of functional glass using new technologies: electromagnetic wave shielding glass, glass substrate for microelectronic use, infrared transmitting lead-free glass, electronic-grade large-scale quartz glass products (such as pipe, plate, copple, instruments, and utensils), multifunctional windshield with excellent optical performance, extreme materials and products for use in information technologies (including quartz glass bushing and ceramic wafer for waveguide-grade, high-precision optical fiber perform rod); purification processing of raw materials for high pure ($\geq 99.998\%$) or ultrapure ($\geq 99.999\%$) crystal

77. Production of conductive glass for thin film batteries, glass for solar illuminator and conductive glass used in construction

78. Production of glass fiber products and special glass fibers: low dielectric glass fibers, quartz glass fibers, high silica glass fibers, high-strength and high elastic glass fibers, ceramic fibers, etc. and other products

79. Production of optical fibers and their products: optical fiber bundles for image transmission and laser optical fibers for medical treatment, super second-generation and third-generation microchannel plates, optical fiber panels, image inverters, and glass fiber cones

80. Standard refinement of ceramics raw materials and production of high-grade decorative materials used in ceramics

81. Production of environment-friendly (non-chromizing) refractory materials used in

furnaces, including but not limited to cement, electronic glass, ceramics, and microporous carbon bricks

82. Production of porous ceramics
83. Production of new inorganic and non-metallic materials and products: composite materials, special ceramics, special sealing materials (including high-speed oil-seal materials), special friction materials (including high-speed friction brake products), special binding materials, special latex materials, underwater acoustic rubber products, and Nano materials
84. Production of organic-inorganic composite cellular insulation materials
85. Production of high-tech composite materials: continuous fiber reinforced thermoplastic composite materials and preregs, auxiliary materials for moulding of resin-based composite materials with thermal resistance of more than 00°C, resin-based composite material (including sports products and lightweight high-strength parts of vehicle), special-function composite materials and their products (including composite products used in deep water or for diving, and composite products for medical treatment and recuperation), carbon or carbon composite materials, high-performance ceramic-based composite materials and their products, metal or glass-based composite materials and their products, metal-layered composite materials and their products, ultra-high pressure composite rubber hoses (pressure ≥ 20 MPa), and larger passenger aircraft tires
86. Production of raw materials for precision and high-performance ceramics: ultra-fine silicon carbide (SiC) powder (purity $>9\%$, average particle size $< \mu\text{m}$), ultra-fine silicon nitride powder (Si₃N₄) (purity $>9\%$, average particle size $< \mu\text{m}$), high-purity ultra-fine alumina powder (purity $>9.9\%$, average particle size $< .5 \mu\text{m}$), low-temperature sintered zirconia (ZrO₂) powder (sintering temperature $< 350^\circ\text{C}$), high-purity aluminum nitride (AlN) powder (purity $>9\%$, average particle size $< 1 \mu\text{m}$), rutile titanium diode TiO₂ powder (purity $>8.5\%$), white carbon black (particle size $< 00 \text{ nm}$), and

barium titanate (purity $>9\%$, particle size $< \mu\text{m}$)

87. Development and production of high-quality artificial crystals and thin film transistor products: high-quality artificially synthesized crystal (piezoelectric crystal and ultraviolet ray transmitting crystal), super-hard crystal (cubic boron nitride crystal), high-temperature resistant and highly-insulated artificially synthesized crystal (artificially synthesized mica), new electro-optical crystal, high-power laser crystal and large-scale scintillation crystal, diamond-film tool, ultrathin synthetic diamond saw blade with a thickness of not more than .3 mm
88. Fine processing of non-metallic minerals (ultra-fine grinding, high purifying, refining, and modified performance)
89. Production of ultra-high-power graphite electrodes
90. Production of pearl mica (particle size of $150 \mu\text{m}$)
91. Production of multi-dimensional and multi-directional integral fabrics and shape fabrics
92. Safe disposal of solid wastes using new dry process cement kilns
93. Recycling of building waste
94. Comprehensive utilization of industrial by-product gypsum and other industrial wastes
95. Development and application of new technologies for the comprehensive utilization of non-metal mine tailings; ecological restoration of mines

Nonferrous Metal Smelting and Rolling Industries

96. Production of silicon single crystals and polished wafers with a diameter of 00 mm or more
97. Production of high-tech nonferrous materials: compound semiconductor materials (gallium arsenide, gallium phosphide, indium phosphide, and gallium nitride), high-temperature superconducting materials, memory alloy materials (titanium nickel and copper and iron-based memory alloy materials), ultra-fine (Nano) calcium carbide and ultra-fine (Nano) crystal hard alloy, ultra-hard composite materials, precious metal composite materials, light

metal composite materials and combination of dissimilar materials, aluminium foils for radiators, medium and high-voltage cathode capacitor aluminum foils, special large aluminum alloy sections, aluminum alloy precision forging dies, overhead conductors for electrified railway lines, ultra-thin copper strips, copper alloy materials for corrosion-resistant heat exchangers, high-performance copper-nickel and copper-iron alloy strips, materials for processing beryllium copper strips, lines, pipes and rods, high-temperature resistant and anti-senescence tungsten filaments, magnesium alloy castings, lead-free solder, magnesium alloys and their products, foamed aluminum, smelting and processing of titanium alloy, sponge zirconium at atomic energy level, and deeply processed tungsten and molybdenum products

Metal Products

98. Research, development and manufacturing of new types of light-weight and environment-friendly materials for aviation, aerospace, automobiles and motorcycles (including but not limited to special-purpose aluminum sheets, aluminum-magnesium alloy materials, and aluminum alloy motorcycle frames)
99. Research, development and manufacturing of light metal semisolid rapid formation materials
100. Manufacturing and processing (including painting and processing inner and outer surface of products) of metal packing products (complete products, wall thickness <.3 mm) used for packing various kinds of grain, oil, food, vegetables, fruits, beverages and household chemicals
101. Manufacturing of nickel-saving stainless steel products

General Equipment Manufacturing

102. Manufacturing of high-end computerized numerical controlled (CNC) machine tools and key spare parts: five-axis alignment CNC machine tools, CNC coordinate boring and milling processing centre, CNC coordinate grinding machines

103. Manufacturing of multi-station forging forming machines of,000 tons or above
104. Manufacturing of equipment for dismantling, crushing and postprocessing and sorting of retired automobiles
105. Manufacturing of flexible transfer lines (FTL)
106. Manufacturing of vertical multi-joint industrial robots, and welding robots and relevant welding devices and equipment
107. Manufacturing of sub-micron and ultra-fine grinders
108. Manufacturing of wheeled or crawler cranes of00 tons or above
109. Design and manufacturing of high-pressure plunger pumps and engines with working pressure ≥ 5 MPa and low-speed large-torque engines with working pressure ≥ 5 MPa
110. Manufacturing of integrated hydraulic-pressure multiple unit valve with working pressure of ≥ 5 MPa and electro-hydraulic proportional servo elements
111. Design and manufacturing of valve terminal, pneumatic solenoid valve of less than.35 W and high-frequency electrically-controlled gas valves of00 Hz or more
112. Design and manufacturing of hydrostatic drive devices
113. Development and manufacturing of non-contact gas film seals with pressure >0 MPa and dry gas seals with pressure >0 MPa (including experimental devices)
114. Development and manufacturing of equipment for automobile polymer materials (friction plates, remodeled phenolic pistons, non-metallic hydraulic master/sub-pumps, etc.)
115. Manufacturing of the third and more generation car wheel hub bearings, bearings for high or medium-grade CNC machine tools or processing centres, high-speed wire rod or plate rolling mill bearings, high-speed railway bearings, low-noise bearings with vibration below Z4, P4 or P2 level bearings of various bearings, bearings of wind turbine generator set, and aircraft bearings
116. Manufacturing of high-density, high-precision and complex-shaped powder

metallurgical parts and chains used for automobile, engineering machinery, etc.

117. Manufacturing of gear transmission used for wind power or high-speed rail, gear transmission agent with adjustable blades used for vessels, and large-sized and heavy-load gear boxes
118. Manufacturing of high-temperature resistant insulation materials (F and H insulation classes) and insulation moulding products
119. Development and manufacturing of accumulator bladders, and rubber and plastic seals for hydropneumatic use
120. Manufacturing of high-precision, high-strength (level 2.9 or above), special-shaped and assembly fasteners
121. Manufacturing of miniature precision transmission junction pieces (clutches)
122. Manufacturing of coupling shaft for heavy rolling mills
123. Remanufacturing of machinery such as machine tools, engineering machinery and railroad engine equipment, and remanufacturing of automobile parts and key components for medical imaging equipment, and remanufacturing of office facilities such as duplicators
124. Development and manufacturing of digital cameras with pixel of 0 million or more or horizontal field of 20° or above, and other optical lenses and optical-electric modules
125. Manufacturing of office machinery (including those for industrial use): multi-function integrated office equipment (copy, print, fax and scanning), printing equipment, high resolution printing head with precision, 400 dpi and more, and photosensitive drum
126. Manufacturing of film machines: K and K digital film projector, digital film camera, digital imaging and editing equipment

Special-Purpose Equipment Manufacturing

127. Manufacturing of trackless equipment for excavation, loading and transport in mines: including but not limited to mechanically-driven tippers for mining with a capacity of 00 tons or more, mobile crushers, bucket excavators with a capacity of, 000 cubic

meters or more per hour, loaders for mining with a capacity of cubic meters or more, and electrically-dragged coal mining machines of, 500 kilowatt or more

128. Manufacturing of equipment for geophysical exploration (excluding gravity or magnetic measurement) and well logging: MEME seismometers, digital telemetric seismographs, digital imaging systems and digitally controlled well logging systems, devices and apparatus for horizontal wells, directional wells and drilling rigs, and measurement-while-drilling (MWD) tools
129. Manufacturing of equipment for oil exploration, drilling, collection and transportation: floating drilling systems and floating production systems with an operating water depth of more than, 500 meters and the supporting subsea oil extraction, collection and transportation equipment
130. Manufacturing of large-calibre rotary drilling rigs with a calibre of meters or more and depth of 0 meters or more, push benches with a diameter of .2 meters or more, complete sets of large equipment with a pull-back force of 00 tons or more for laying underground pipes and lines without digging, and underground diaphragm wall construction drilling rigs
131. Design and manufacturing of large bulldozers of 20 horsepower or more
132. Design and manufacturing of silt removers with a capacity of 00 cubic meters or more per hour and dredging devices for dredgers with a capacity of, 000 tons or more
133. Design and manufacturing of equipment for the construction of concrete cut-off walls used for flood prevention dikes
134. Manufacturing of underwater earthwork construction machinery: bulldozers, loaders, excavators, etc. operating nine meters underwater or deeper
135. Manufacturing of equipment for maintenance and automatic testing of highways and bridges
136. Manufacturing of equipment for operational monitoring, ventilation, disaster prevention and rescue systems of highway tunnels

137. Design and manufacturing of maintenance machinery and inspection and monitoring equipment for large-scale railway construction, railway tracks, bridges and tunnels, and their key parts and components
138. Manufacturing of equipment for (asphaltic) linoleum tiles and equipment for producing galvanized steel sheets and other metal roofs
139. Manufacturing of equipment for environment-friendly and energy-saving on-site polyurethane spraying waterproof and thermal insulation systems; technology of preparing polyurethane sealants and manufacturing of relevant equipment, and technology of preparing improved silicone sealants and manufacturing of relevant production equipment
140. Design and manufacturing of high-precision strip mills (thickness precision of 0 microns)
141. Manufacturing of ore dressing equipment for multi-element, fine-particle and refractory metal minerals
142. Manufacturing of the key equipment of complete sets of ethylene equipment with an annual capacity of million tons or more: mixing granulators with an annual processing capacity of 00,000 tons or more, helical-conveyor centrifuges with a diameter of,000 mm or more, low-flow high-head centrifugal pump
143. Design and manufacturing of metal product moulds (extrusion dies for pipes, rods and section bars made of copper, aluminum, titanium and zirconium)
144. Design and manufacturing of punching dies for automobile body covers, large-sized injection moulds for automobile dashboard, bumper, etc., and clamps and gauges for automobiles and motorcycles
145. Design and manufacturing of production equipment for power batteries for automobiles
146. Design and manufacturing of precise die moulds (punching dies with a precision higher than .02 mm and cavity moulds with a precision higher than .05 mm)
147. Design and manufacturing of non-metal product moulds
148. Manufacturing of beer bottling equipment with a capacity of 0,000 bottles or more per hour, hot and medium-temperature beverage bottling equipment with a capacity of 0,000 bottles or more per hour, and aseptic filling equipment with a capacity of 6,000 bottles or more per hour
149. Production technologies of amino acids, enzyme preparations, food additives, etc. and the manufacturing of key equipment
150. Manufacturing of complete sets of equipment for animal feed processing with a capacity of 0 tons or more per hour and the key parts of such equipment
151. Manufacturing of equipment for lightweight corrugated boards and cartons with corrugation height of .75 mm or less
152. Manufacturing of sheet-fed and multi-color offset presses (width ≥ 50 mm; printing speed: single side and multiple colors $\geq 6,000$ sheets per hour, and double sides and multiple colors $\geq 3,000$ sheets per hour)
153. Manufacturing of single-width single-paper path web-fed lithographic printing presses with a printing speed of more than 5,000 bisect sheets per hour (787 \times 880 mm), double-width single-paper path web-fed lithographic printing presses with a printing speed of more than 70,000 bisect sheets per hour (787 \times 880 mm), and commercial web-fed lithographic printing presses with a printing speed of more than 0,000 bisect sheets per hour (787 \times 880 mm)
154. Manufacturing of multi-color wide flexographic presses (printing width ≥ 300 mm and printing speed ≥ 50 meters per minute), inkjet digital printing presses (used for publication; printing speed ≥ 50 meters per minute and resolution ≥ 00 dpi; used for packaging: printing speed ≥ 0 meters per minute and resolution ≥ 000 dpi; used for variable data: printing speed ≥ 00 meters per minute and resolution ≥ 00 dpi)
155. Manufacturing of systems for ink color computer pre-setting, remote ink color control, water-ink speed tracking, automatic printing quality inspection and tracking, and shaft-less driving technology; manufacturing of high-speed automatic pasters and feeders with a speed of 5,000

sheets per hour, remotely adjustable high-speed folding machines, automatic overprinting systems, cooling devices, silicon-adding systems, and deviation adjustment devices

156. Manufacturing of electronic-gun automatic coating machines

157. Deep processing technology for sheet glass and manufacturing of relevant equipment

158. Manufacturing of complete sets of equipment such as new types of paper (including pulp) making machines

159. Manufacturing of equipment using new leather post ornament and processing technology

160. Development and manufacturing of new agricultural product processing and storage equipment: new equipment for the processing, storage, preservation, grading, packaging, and drying of grains, oil plants, vegetables, dried and fresh fruit products, meat products, aquatic products, and other products; agricultural product quality inspection instruments and equipment; damage-free quality inspection instruments and equipment for agricultural products; rheometers, farinographs, ultramicro crushing equipment, high-efficiency dewatering equipment, high-efficiency fruit juice condensation equipment achieving five or more effects, sterilization equipment for powder food materials, solid and semisolid food aseptically packaging equipment, and disk-type centrifugal separators

161. Manufacturing of agricultural machinery: agricultural equipment (automatic irrigation equipment for greenhouses, equipment for automatic disposition of nutrient solutions and fertilization, high-efficiency vegetable seedling equipment, and soil nutrient analysis equipment), tractors with an engine power of 00 kilowatts or more and the auxiliary farm implements, diesel engines with low fuel consumption, low noise and low emission, sprayers auxiliary to large tractors and equipped with residual droplets retrieval devices, high-performance rice transplanters, cotton picking machines and cotton picking platforms, self-propelled

(hydraulically or mechanically-driven) corn combine harvesters adaptable to various row spacings, peanut harvesters, rapeseed harvesters, cane harvesters, and beet harvesters

162. Manufacturing of forestry machinery and instruments using new technology

163. Manufacturing of equipment for the collection, bundling and comprehensive utilization of crop straws

164. Manufacturing of equipment for the resource utilization of agricultural waste and waste from livestock and poultry breeding meeting a certain scale

165. Manufacturing of agricultural equipment using fertilizer-saving, pesticide-saving or water-saving technology

166. Manufacturing of equipment for cleaning electromechanical wells and equipment for producing cleaning agents

167. Manufacturing of electronic endoscopes

168. Manufacturing of fundus cameras

169. Manufacturing of key components of medical imaging equipment (including but not limited to high-field-strength superconducting magnetic resonance imaging equipment, X-ray computed tomography imaging equipment, and digital color diagnostic ultrasound equipment)

170. Manufacturing of (3D) ultrasonic transducers for medical use

171. Manufacturing of equipment for boron neutron capture therapy (BNCT)

172. Manufacturing of image-guided intensity modulated radiation therapy systems

173. Manufacturing of haemodialysis machines and hemofiltration machines

174. Manufacturing of equipment for full-automatic biochemistry monitoring, five-classified blood cell analyzers, full-automatic chemiluminescence immunity analyzers, and high throughput gene sequencing system

175. New technology for drug quality control and manufacturing of new equipment for drug quality control

176. Development of new analysis technology and new extracting process for active substance in natural drugs; development and manufacturing of new extracting equipment

177. Manufacturing of multi-layer co-extrusion water-cooled blown film equipment for non-PVC medical infusion bags
178. Development and manufacturing of new textile machinery, key parts and components, and textile testing and experimental apparatus
179. Manufacturing of computer-aided jacquard artificial fur machines
180. Manufacturing of equipment specially for producing solar cells
181. Manufacturing of air pollution prevention and control equipment: high temperature-resistant and corrosion-resistant filtering materials, low-NO_x combustion devices, catalyst for flue gas denitrogenation and complete sets of denitrogenation equipment, flue gas desulfurization equipment, flue gas dedusting equipment, industrial organic exhaust purification equipment, diesel vehicle exhaust purification equipment, and heavy metal exhaust air treatment equipment
182. Manufacturing of water pollution prevention and control equipment: horizontal spiral centrifugal dehydrators, membrane and membrane materials, ozone generators with a capacity of more than 0 kg/h, chlorine dioxide generators with a capacity of more than 0 kg/h, ultraviolet disinfection devices, small domestic sewage treatment equipment used in rural areas, and heavy metal wastewater treatment equipment
183. Manufacturing of solid waste treatment and disposal equipment: sewage plant sludge disposal and resource recycling equipment, complete sets of refuse incineration equipment with a daily treatment capacity of 00 tons or more, landfill leachate treatment technology equipment, anti-seepage geo-membranes in landfills, building waste treatment and resource recovery utilization equipment, devices for disposal of hazardous waste, devices for power generation with biogas in landfills, treatment equipment for ferrous wastes, and soil remediation equipment
184. Development and manufacturing of equipment for the comprehensive utilization of red mud from aluminum industry
185. Manufacturing of equipment for the comprehensive utilization of mine tailings
186. Manufacturing of equipment for the collection, treatment and recycling of used and waste plastics, electrical appliances, rubbers and batteries
187. Manufacturing of reclamation equipment for used and waste textiles
188. Manufacturing of equipment for the remanufacturing of used and waste mechanical and electrical products
189. Manufacturing of devices for the comprehensive utilization of used and waste tires
190. Environmental protection technology for aquatic ecosystems and the manufacturing of relevant equipment
191. Manufacturing of portable assembling water purification equipment
192. Unconventional water treatment or recycling equipment and water quality monitoring instruments
193. Leak test equipment and instruments for industrial water pipeline networks and equipment (appliances)
194. Development of technologies for seawater desalination and circulating cooling with a daily capacity of 00,000 cubic meters or more and manufacturing of relevant complete sets of equipment
195. Manufacturing of special meteorological observation and analysis equipment
196. Technology system development for seismic stations, networks and mobile seismologic observation and manufacturing of relevant apparatus and equipment
197. Manufacturing of radial tire building machine with four or more drums
198. Manufacturing of rolling resistance testers and establishment of tire noise laboratories
199. Manufacturing of equipment using new technology for heat supply metering and temperature control devices
200. Manufacturing of equipment for hydrogen energy preparation, storage and transportation and inspection systems
201. Manufacturing of new heavy residual oil gasification and atomizing nozzles, high-efficiency steam trap valve with a leakage rate of 5% or below, and high-temperature

ceramic heat exchanger with temperature of,000°C or above

202. Manufacturing of devices for recovery of marine oil spilling
203. Manufacturing of equipment for utilization of low concentration coalmine gas and ventilation air methane
204. Development and utilization of clean coal technologies and products as well as manufacturing of relevant equipment (coal gasification and liquefaction, coal water slurry and industry shape-coal)
205. Development of technologies for fire prevention and control and rescue to be used in large-scale public buildings, high-rise buildings, petrochemical facilities, forest, mountains or water areas and underground facilities, and manufacturing of relevant equipment
206. Manufacturing of intelligent emergency medical rescue equipment
207. Manufacturing of hydrologic monitoring sensors

Automobile Manufacturing

208. Manufacturing of automobile engines and establishment of engine research and development institutions: gasoline engines with power of not less than 0 kilowatts per liter, diesel engines with power of not less than 0 kilowatts per liter and displacement of less than liters, diesel engines with power of not less than 0 kilowatts per liter and displacement of more than liters, and engines using new energy resources such as fuel cells and mixed fuels
209. Manufacturing of key automobile parts and components and research and development of key technologies: dual-clutch transmission (DCT), continuously variable transmission (CVT), automated mechanical transmission (AMT), gasoline engine turbocharger, viscous coupling (for four-wheel drive), actuator for automatic transmission (electromagnetic valve), hydraulic retarder, eddy current retarder, gas generators for automobile safety air bags, common rail fuel injection technology (with maximum injection pressure of more than,000 pa), variable geometry turbocharging (VGT), variable nozzle

turbocharging (VNT), engine emission control devices meeting China's Phase V pollutant emission standards, intelligent torque management (ITM) systems and coupler assembly, steer-by-wire systems, , diesel particulate trap devices, special-purpose axles for lowfloor large buses, energy-absorbing steering system, variable frequency air-conditioning system for large and medium buses, special rubber automobile accessories, and key parts and components of the above parts and components

210. Manufacturing and research and development of automobile electronic devices: electronic control systems and key parts and components of engine and chassis, vehicle electronic technologies (automobile information system and navigation system), automobile electronic bus network technologies, input (sensor and sampling system) and output (actuator) components of electronic control system, electronic controllers for electric power steering system, embedded electronic integrated systems, electronically-controlled air springs, electronically-controlled suspension system, electronic valve system devices, electronic combination instrument, ABS/TCS/ESP systems, Brake-By-Wire (BBW) system, gearbox transmission control unit (TCU), tire pressure monitoring system (TPMS), on-board diagnostics (OBD), engine anti-theft system, automatic bump-shielded system, and testing systems for automobile and motorcycle testing and maintenance
211. Manufacturing of key parts and components of new energy automobiles: battery separators (thickness of 5-40 μm, porosity of 0%-60%); battery management system, motor management system, electronic control integration of electric vehicles; driving motors of electric vehicles (peak power density ≥ 5 kW/kg, high-efficiency area: 5%, efficiency in working area $\geq 0\%$), vehicle DC/DC (input voltage of 00 V – 00 V), high-power electronic devices (IGBT, voltage class ≥ 00 V, current ≥ 00 A); and plug-in hybrid electromechanical coupling drive systems;

low-platinum catalyst for fuel cell, composite membranes, membrane electrodes, humidifier control valves, air compressors, hydrogen circulating pumps, and 0 MPa hydrogen cylinders.

Manufacturing of Railways, Ships, Aircrafts and Other Transportation Equipment

- 212. Manufacturing of engine emission control devices for motorcycles with large engine capacity (engine capacity >50 ml) that meet China's Phase IV pollution discharge standards for motorcycles
- 213. Design, manufacturing and maintenance of civil aircrafts: aircrafts for trunk lines, regional aircrafts and utility aircrafts
- 214. Manufacturing and maintenance of civil aircraft parts and components
- 215. Design and manufacturing of civil helicopters
- 216. Manufacturing of civil helicopter parts and components
- 217. Manufacturing of ground-effect and water-effect aircrafts as well as design and manufacturing of unmanned aircrafts and aerostats
- 218. Design, manufacturing and maintenance of aircraft engines, engine parts and components and aircraft auxiliary power systems
- 219. Design and manufacturing of airborne equipment for civil aviation
- 220. Manufacturing of aviation ground equipment: civil airport facilities, civil airport operation guarantee facilities, ground facilities for flight tests, flight simulation and training equipment, aviation test and measurement equipment, equipment for aviation ground tests, integrated test equipment for airborne equipment, special equipment for aeronautical manufacturing, special equipment for trail manufacturing of aeronautic materials, civil aircraft ground reception and application equipment, carrier rocket ground testing equipment, and equipment for carrier rocket mechanics and environmental experiments

- 221. Design and manufacturing of civil satellites, and manufacturing of civil satellite payloads
- 222. Manufacturing of parts and components of civil satellites
- 223. Manufacturing of inspection equipment for satellite-borne products
- 224. Design of cruise ship and deepwater (3,000 meters or more) marine engineering equipment
- 225. Design of low- and medium-speed diesel engines of vessels and their parts and components
- 226. Design of cabin machinery of vessels
- 227. Design of vessel communication and navigation equipment
- 228. Design of yachts

Electric Machinery and Equipment Manufacturing

- 229. Manufacturing of key auxiliary equipment used for one million-kilowatt ultra-supercritical thermal power units: safety valves and control valves
- 230. Manufacturing of denitration equipment of sintering machines in steel industry
- 231. Design and manufacturing of seals of thermal power equipment
- 232. Manufacturing of large castings and forgings for coal-fired power station and hydropower station equipment
- 233. Manufacturing of key auxiliary equipment for hydropower generating units
- 234. Manufacturing of power transmission and transformation equipment
- 235. Manufacturing of complete sets of equipment or key equipment for new energy power generation: equipment for photovoltaic power generation, geothermal power generation, tidal power generation, wave power generation, garbage power generation, biogas power generation, and wind power generation with a capacity of 5 megawatts or more
- 236. Manufacturing of Stirling generator sets
- 237. Development and manufacturing of linear motors, planar motors, and their drive systems
- 238. Manufacturing of high-tech green batteries: nickel-metal hydride (Ni-MH) batteries, nickel-zinc batteries, silver-zinc

batteries, lithium-ion batteries, solar batteries, fuel batteries, etc. (excluding energy type of new energy vehicle batteries)

- 239. Manufacturing of refrigeration compressors for air conditioning with motor adopting DC speed control technology, refrigeration compressors for air conditioning with motor adopting CO₂ natural refrigerants, and refrigeration equipment for air conditioning applying renewable energy (air source, water source or ground source)
- 240. Manufacturing of solar air conditioning and heating systems and solar drying devices
- 241. Manufacturing of biomass drying and pyrolysis systems and biomass gasification devices
- 242. Manufacturing of alternating current (AC) variable frequency variable voltage (VFVV) drive devices

Manufacturing of Computers, Communication and Other Electronic Equipment

- 243. Manufacturing of HD digital cameras and digital sound playing equipment
- 244. Manufacturing of TFT-LCD, PDP, OLED and other panel displays and materials of displays (excluding TFT-LCD glass substrate for the generation and below)
- 245. Manufacturing of key parts for large-screen color projection displays, including but not limited to optical engines, light sources, projection screens, high-resolution projection tubes, and micro-display projection modules
- 246. Manufacturing of digital audio and video coding and decoding equipment; equipment for digital broadcasting and television studios; equipment for digital cable television systems; digital audio broadcasting transmission equipment; digital television up and down converters; digital television terrestrial broadcasting single frequency network (SFN) equipment; and equipment for satellite digital TV uplink stations

- 247. Design of integrated circuits; manufacturing of large-scale digital integrated circuits with a line width of 8 micrometers or less; manufacturing of analog or digital-analog integrated circuits with a line width of 1.1 micron or less; manufacturing of MEMS and compound semiconductor integrated circuits; and BGA, PGA, FPGA, CSP, MCM and other advanced encapsulation and testing
- 248. Manufacturing of large- and medium-sized electronic computers, high performance computers with a computing capacity of 10¹² trillion calculations per second, portable minicomputers, large analog simulation systems, and large industrial control computers and controllers
- 249. Manufacturing of computer digital signal processing system and boards
- 250. Manufacturing of graphic and image recognition and processing system
- 251. Development and manufacturing of high-capacity optical and disk drivers and their components
- 252. Manufacturing of high-speed memory system and intelligent memory device with a capacity of 100 TB or more
- 253. Manufacturing of computer-aided design (three-dimensional CAD) systems, electronic design automation (EDA), computer-aided testing (CAT), computer-aided manufacturing (CAM), computer-aided engineering (CAE) systems, and other computer application systems
- 254. Development and production of software products
- 255. Development and manufacturing of materials exclusively for electronic purposes (excluding development and manufacturing of optical fiber performs)
- 256. Manufacturing of equipment, testing instruments, tools and molds exclusively for electronic purposes
- 257. Manufacturing of new electronic parts and components: chip components, sensitive components and sensors, frequency control and selection components, hybrid integrated circuits, power electronic devices, optoelectronic devices, new electromechanical components, polymer solid capacitors, super-capacitors, passive

- integrated components, high-density interconnect (HDI) laminated boards, multi-layer flex printed circuit (FPC) boards, rigid-flex printed circuit (R-FPC) boards, and packaging boards
258. Manufacturing of touch control system (touch control screens, touch components, etc.)
259. Research, development and manufacturing of virtual reality (VR) and augmented reality (AR) equipment
260. Manufacturing of high-brightness light-emitting diodes (LEDs) with luminous efficiency of more than 40 lm/W, LED epitaxial wafers (blue light) with luminous efficiency of more than 40 lm/W and white luminous tubes with luminous efficiency of more than 40 lm/W and power of more than 0.0 mW
261. Development and production of key parts of high-density digital disk drives
262. Production of recordable disks
263. Research, development and manufacturing of key parts and components of D printing equipment
264. Manufacturing of equipment for satellite communication systems
265. Manufacturing of optical communication measuring instruments and optical transceivers with a speed of 10 Gbps or more
266. Manufacturing of ultra-wideband (UWB) communication equipment
267. Manufacturing of equipment for wireless local area networks (including WAPI support) and wide area networks
268. Manufacturing of time division multiplexing equipment (TDM) with rate of 100 Gbps or more, dense wavelength division multiplexing equipment (DWDM), broadband passive network equipment (including EPON, GPON, WDM-PON, etc.), next-generation DSL chips and equipment, optical cross connect (OXC) equipment, automatically switched optical network (ASON) equipment, and transmission equipment for optical fiber communication at more than 10 Gbps SDH
269. Development and manufacturing of IPv6-based next generation internet system equipment, terminal equipment, testing equipment, software, and chips
270. Development and manufacturing of the fourth generation and subsequent mobile communication cell phones, base stations, core network equipment, and network testing equipment
271. Development and manufacturing of (bi-directional) high-end routers with an overall processing capacity of more than 4 Tbps and network switches with a switching capacity of more than 10 Tbps
272. Manufacturing of equipment for air traffic control systems
273. Development and manufacturing of electronic teaching aiding equipment for traditional Chinese medicines based on sound, light, electricity or touch-controlled computer information technologies and human body model with virtual pathology and physiology

Manufacturing of Instruments and Meters

274. Manufacturing of industrial process automatic control system and devices: fieldbus control systems, large-scale programmable logic controller (PLC), two-phase flow meters, solid flow meters, new-type sensors and field measuring meters
275. Development and manufacturing of large precision instruments and high resolution microscope (with a resolution of less than 100 nm)
276. Manufacturing of high-precision digital voltmeters and ammeters (with a span of seven and a half bits or more)
277. Manufacturing of reactive power auto-compensation devices
278. Manufacturing of new instruments and equipment for production safety
279. Manufacturing of VXI bus automatic testing systems (meeting IEEE1155 international standards)
280. Development and manufacturing of coal mine underground monitoring and hazard forecasting systems and coal safety testing and management systems
281. Manufacturing of engineering surveying and geophysical observation equipment
282. Manufacturing of environmental monitoring instruments
283. Manufacturing of instruments and equipment for hydrological data collection,

- processing, and transmission and for flood control early warning
284. Manufacturing of instruments and equipment for marine exploration monitoring
 285. Comprehensive Utilization of Waste Resources
 286. Coal dressing and comprehensive utilization of coal ash (including desulfurized gypsum), coal gangue, etc.
 287. Production of completely biodegradable materials
 288. Recycling and treatment of waste and used electrical and electronic products, automobiles, electromechanical equipment, rubbers, metals, and batteries

IV. Production and Supply of Electric Power, Heating Power, Fuel Gas and Water

289. Construction and operation of ultra-supercritical unit power station with the capacity of a single unit of 100,000-kilowatt or more
290. Construction and operation of back-pressure combined heat and power stations, combined cooling, heating and power stations, and combined heat and power stations with capacity of 100,000 kilowatt or more
291. Construction and operation of large air cooling unit power stations with the capacity of a single unit of 100,000-kilowatt or more in water-deficient areas
292. Construction and operation of integrated gasification combined cycle power generation and other clean coal power generation projects
293. Construction and operation of power generating projects of a single unit of 100,000-kilowatt or more by using fluidized bed combustion boilers and coal gangue, middings and coal slime, etc.
294. Construction and operation of hydropower stations for the primary purpose of power generation
295. Construction and operation of nuclear power stations

296. Construction and operation of new energy power stations (including but not limited to solar energy, wind energy, geothermal energy, tidal energy, tidal current energy, wave energy, and biomass energy)
297. Construction and operation of power grid
298. Seawater utilization (direct utilization of seawater or seawater desalination)
299. Construction and operation of water supply plants
300. Construction and operation of renewable water
301. Construction and operation of sewage treatment plants
302. Construction and operation of vehicle charging stations and battery replacement stations
303. Construction and operation of hydrogen refueling stations

V. Transportation, Warehousing and Postal Service Industries

304. Construction and operation of network of trunk railway lines
305. Construction and operation of intercity railway, urban (suburban) railway, resource-oriented development railway, branch railway lines, and related bridges, tunnels, ferries and station facilities
306. Comprehensive maintenance of infrastructures of high-speed railway lines and intercity railways
307. Construction and operation of highways, independent bridges and tunnels
308. Road freight companies
309. Construction and operation of public wharf facilities in ports
310. Construction and operation of civil airports
311. Public air transportation companies
312. General aviation companies for agriculture, forestry, and fishery
313. International marine transportation companies
314. International container multimodal transportation services
315. Construction and operation of oil (gas) pipelines and oil (gas) depots
316. Construction and operation of coal pipeline transportation facilities

317. Construction and operation of elevated three-dimensional automatic warehousing facilities and integrated warehousing facilities related to packaging, processing and distribution services

VI. Wholesale and Retail Industries

318. Common distribution of general commodities, low-temperature distribution of live and fresh agricultural products and special drugs, as well as other logistical services and relevant technological services

319. Rural chain distribution

320. Construction and operation of pallet and container unit sharing system

VII. Leasing and Commercial Service Industries

321. International economic, science and technology, environmental protection, and logistical information consulting services

322. Engaging in system application management and maintenance, information technology support management. Bank back-office services, financial settlement, software development, off-shore call centres, data processing and other information technology and business process outsourcing services by contracting outsourced services

323. Venture capital enterprises

324. Intellectual property right services

325. Household services

VIII. Scientific Research and Technical Services

326. Bioengineering and biomedical engineering technologies and biomass energy development technology

327. Isotope, radiation and laser technology

328. Marine development and marine energy exploitation technology, technology for comprehensive utilization of marine chemical resources, development and

refinement or deep processing of related products, and marine medicine and biochemical product development technology

329. Ocean monitoring technology (ocean tidal waves, weather and environment monitoring) and submarine detection and oceanic resources exploration and assessment technology

330. Technologies for high value-added utilization of seawater chemical resources, including but not limited to production of salt and extraction and deep processing of potassium, bromine, magnesium, lithium by comprehensively utilizing desalinated dense seawater

331. Offshore oil pollution cleaning and ecological restoration technology and relevant product development, technology for prevention and treatment of seawater eutrophication, technology for prevention and treatment of marine life explosive growth disaster, and coastal zone ecological environment restoration technology

332. Development of energy saving and environmental protection technologies and related services

333. Development and application of technologies for recycling and comprehensive utilization of resources and for recycling of emissions and discharges from enterprise production

334. Environmental pollution treatment and monitoring technologies

335. New technologies for energy efficiency in chemical fiber production and printing and dyeing processing and for the treatment of exhaust gas, waste liquid and waste residue

336. Desertification prevention and desert treatment technologies

337. Comprehensive management technology for grassland-livestock balance

338. Civil satellite application technology

339. Research and development centres

340. High and new technology, new product development and enterprise incubation centres

341. Development and application of Internet of things technology

342. Industrial design, architectural design, costume design and other creative industries

IX. Water Conservancy, Environmental, and Public Facility Management Industries

343. Construction and operation of urban enclosed roads

344. Construction and operation of urban subway, light railway and other track transport

345. Construction and operation of sewage and garbage treatment plants, hazardous waste treatment and disposal plants (incineration plants and landfills), and environmental pollution treatment and control facilities

346. Construction and operation of urban parking facilities

X. Education

347. Non-academic vocational training institutions

XI. Health and Social Services

348. Service institutions for seniors, the disabled and children

349. Nursing institutions for the aged

XII. Cultural, Sports and Entertainment Industries

350. Operation of performance sites

351. Operation of sports grounds and body-building, contest performance and sports training and intermediate services

Special Management Measures for Foreign Investment Access

(Negative List for Foreign Investment Access)

Explanations

- I. The Special Management Measures for Foreign Investment Access (Negative List for Foreign Investment Access) lists the equity control, executive requirements and other restrictive measures for foreign investment access in a unified way. Restrictive measures with consistent proportion of domestic and foreign funds and those that are not part of the scope of access are not included in the Special Management Measures for Foreign Investment Access (Negative List for Foreign Investment Access).
- II. Foreign investors shall not engage in business activities as individual industrial and commercial households, investors of individual proprietorship enterprises and members of farmers' professional cooperatives.
- III. Foreign investors shall not be engaged in prohibited items specified in the Special Management Measures for Foreign Investment Access (Negative List for Foreign Investment Access); engaged in restricted items with requirements for proportion of foreign investment and shall not establish foreign-invested partnership enterprises.
- IV. If a domestic company, enterprise or natural person acquiring a domestic company associated with it with its company lawfully established or controlled outside China involves foreign investment items and the establishment and change of enterprises, the current provisions shall prevail.
- V. For the overlapping clauses between the Catalogue of Encouraged Industries for Foreign Investment and the Special Management Measures for Foreign Investment Access (Negative List for Foreign Investment Access), the policy of encouragement shall be enjoyed and

meanwhile the relevant access regulations shall be followed.

- VI. If the Mainland and Hong Kong Closer Economic Partnership Arrangement and its supplements and service trade agreements, the Mainland and Macao Closer Economic Partnership Arrangement Special Administrative Zone and its supplements and service trade agreements, the Cross-strait Economic Cooperation Framework Agreement and its subsequent agreements, the free trade zone agreements and investment agreements signed by and between China and other relevant countries, international treaties to which China is a party and Chinese laws and regulations provide otherwise, the relevant provisions shall prevail.
- VII. If foreign service providers providing news and cultural services (including Internet related news and cultural services) in the territory of Chinese must fulfill the relevant approval and safety assessment as well as executive requirements, then current relevant provisions shall prevail.

Part I

Catalogue of Restricted Industries for Foreign Investment

1. Selection and cultivation of new varieties of crops and production of seeds (with Chinese party as the controlling shareholder)
2. Exploration and exploitation of oil and natural gas (including coal-bed gas and excluding oil shale, oil sand, shale gas and so on) (limited to Sino-foreign equity or contractual joint ventures)
3. Exploration and exploitation of special and rare kinds of coal (with Chinese party as the controlling shareholder)
4. Exploration and exploitation of graphite
5. Printing of publications (with Chinese party as the controlling shareholder)
6. Smelting and separation of rare earth (limited to Sino-foreign equity or contractual joint ventures); smelting of tungsten
7. Manufacturing of complete automobiles and special purpose motor vehicles: the proportion of Chinese shares shall not be less than 50%. A foreign investor may set up at most two joint ventures to manufacture complete products of the same kind (including passenger vehicles and commercial vehicles), but such limitation can be ignored if the foreign investor, jointly with its Chinese joint venture partner, acquires other Chinese automobile manufactures and establishes a joint venture to produce complete pure electric vehicle products
8. Repair, design and manufacturing of ships (including subsections) (with Chinese party as the controlling shareholder)
9. Design, manufacturing and maintenance of aircrafts for trunk lines and regional aircrafts; design and manufacturing of helicopters 3 tons or more; manufacturing of ground-effect and water-effect aircrafts; design and manufacturing of unmanned aircrafts and aerostats (with Chinese party as the controlling shareholder);
10. Design, manufacturing and maintenance of utility aircrafts (limited to Sino-foreign equity or contractual joint ventures)

11. Production of satellite television broadcasting ground receiving facilities and key parts
12. Construction and operation of nuclear power stations (with Chinese party as the controlling shareholder)
13. Construction and operation of power grid (with Chinese party as the controlling shareholder)
14. Construction and operation of pipeline networks for gas, heat, and water supply and sewage in cities with a population of more than, (with Chinese party as the controlling shareholder)
15. Construction and operation of network of trunk railway lines (with Chinese party as the controlling shareholder)
16. Railway passenger transport companies (with Chinese party as the controlling shareholder)
17. Domestic water transport companies (with Chinese party as the controlling shareholder); international marine transportation companies (limited to Sino-foreign equity or contractual joint ventures)
18. Construction and operation of civil airports (with Chinese party as the relative controlling shareholder)
19. Public air transportation companies (with Chinese party as the controlling shareholder and the proportion of investment by a foreign-owner enterprise and its affiliated enterprises not exceeding 25%; the legal representative must have Chinese nationality)
20. General aviation companies (the legal representative must have Chinese nationality; limited to Sino-foreign equity joint ventures in case of general aviation companies for agriculture, forestry, and fishery; with Chinese party as the controlling shareholder in case of other general aviation companies)
21. Telecommunication companies: limited to services that WTO promises to open; value-added telecommunication services (with the proportion of foreign investment not exceeding 50%, except for e-commerce); basic telecommunication services (with Chinese party as the controlling shareholder)
22. Purchase and wholesale of rice, wheat and corn
23. Vessel agencies (with Chinese party as the controlling shareholder)
24. Construction and operation of gas stations (in the case of the same foreign investors selling product oil of different varieties and brands from multiple suppliers through more than 30 chain gas stations, the Chinese parties shall be the controlling shareholders)
25. Banks (the proportion of investment in capital in a Chinese-funded commercial bank by a foreign financial institution and the affiliated party under common control as promoter or strategic investor shall not exceed 20%, while the proportion of investment in capital in a Chinese-funded commercial bank by more than one foreign financial institution and the affiliated party under common control as promoter or strategic investor shall not exceed 25%; the foreign financial institutions investing in China's small or middle-sized financial institutions in rural areas must be banking financial institutions; the foreign investors establishing foreign bank branches, wholly foreign-funded banks and joint Chinese-foreign banks, the sole or controlling shareholder must be foreign commercial banks, while non-controlling shareholders may be foreign financial institutions)
26. Insurance companies (in the case of life insurance companies, the proportion of foreign investment shall not exceed 50%)
27. Securities companies (limited in establishment to underwriting and sponsoring of A-shares, B-shares, government and corporate bonds, brokerage of B-shares, brokerage and proprietary trading of government and corporate bonds, qualified companies which have been established for two years or more may apply for expansion of business scope; with Chinese party as the controlling shareholder), and securities investment fund management companies (with Chinese party as the controlling shareholder)
28. Futures companies (with Chinese party as the controlling shareholder)

29. Market survey (limited to Sino-foreign equity or contractual joint ventures, and radio and television ratings surveys shall be conducted by enterprises with the Chinese party as the controlling shareholder)
30. Surveying and mapping companies (with Chinese party as the controlling shareholder)
31. Pre-school, ordinary high school and higher educational institutions (limited to Sino-foreign contractual educational institutions, with Chinese party as the leader □)
32. Medical institutions (limited to Sino-foreign equity or contractual joint ventures)
33. Production of radio and television programs and movies (limited to contractual joint ventures)
34. Construction and operation of movie theatres (with Chinese party as the controlling shareholder)
35. Performance brokerage agencies (with Chinese party as the controlling shareholder)
36. *"With the Chinese party as the leader" refers to the principal or person primarily in charge of administration shall have Chinese nationality, and the number of Chinese members of the board of governors, the board of director or joint administrative committee of a Sino-foreign contractual educational institution shall be not less than 0%.

Part II

Catalogue of Prohibited Industries for Foreign Investment

1. Research and development, breeding, and planting of China's rare and special varieties and production of relevant breeding material (including quality genes in planting industry, animal husbandry, and aquaculture)
2. Breeding of genetically modified crops, livestock and poultry and aquatic fingerlings and production of genetically modified seeds (seeding)
3. Fishing in the sea area and inland waters under China's jurisdiction
4. Exploration and exploitation of tungsten, molybdenum, tin, stibium and fluorite
5. Exploration, exploitation and ore dressing of rare earth
6. Exploration, exploitation and ore dressing of radioactive minerals
7. Application of processing techniques such as steaming, stir-frying, roasting, moxibustion, and calcination for making small pieces of ready-for-use traditional Chinese medicines, and production of traditional Chinese patent medicine of secret prescriptions
8. Smelting and processing of radioactive minerals, and production of nuclear fuels
9. Manufacturing of weapons and ammunitions
10. Production of Xuan paper and Chinese ink ingot
11. Air traffic control
12. Postal companies; domestic express delivery of letters
13. Wholesale and retail of tobacco, cigarette, redrying tobacco and other tobacco products
14. Social survey
15. Chinese legal affairs consulting (except to the providing of information relating to the influence of Chinese legal environment)

16. Development and application of human stem cell and genetic diagnosis and treatment technologies

17. Geodetic surveying; marine charting; aerial photograph for surveying and mapping purposes; ground mobile surveying; administrative boundary surveying and mapping; compilation of topographic map, world administrative map, national administrative map, administrative map at provincial level or below, national school map, local school map, true three-dimensional map and navigating digital map; local geological mapping; and survey for mineral geology, physical geography, geochemistry, hydrogeology, environmental geology, geological disasters, remote sensing geology and so on.

18. Development of wild animal and plant resources originated in and protected by China

19. Compulsory education institutions

20. News agencies (including but not limited to the news agency)

21. Editing and publishing of books, newspapers and periodicals

22. Editing, publishing and production of audio and video products and electronic publications

23. All radio stations, television stations, radio and television channels (frequencies), radio and television transmission and coverage networks (transmitting stations, relay stations, radio and television satellites, satellite uplink stations, satellite receiving and transmitting stations, microwave stations, monitoring stations, and cable radio and television transmission and coverage networks), radio and television video on demand services and installation of satellite television broadcasting ground receiving facilities

24. Radio and television program (including introduced business) production and operation companies

25. Movie production companies, distribution companies, and theatres

26. Internet news information services, online publishing services, online audio and video

programs, business premises for internet-access services, internet cultural business (excluding music), and online public information publishing services

27. Auction enterprises and cultural relic stores to engage in auction of cultural relics

28. Humanities and social sciences research institutes

Note: The “above” and “below” mentioned in the Catalogue of Industries for Guiding Foreign Investment (Revision 017) does not include the number; the “and above” or “and below” includes the number.