

Catalogue of

Encouraged Industries in Western China, 2014

Provided by Dezan Shira & Associates



silkroad@dezshira.com



www.dezshira.com

Catalogue of Encouraged Industries in Western China

The Catalogue of Encouraged Industries in Western China was passed into law by the Decree of the National Development and Reform Commission No. 15, and was approved by the Chinese State Council and promulgated effective from 1 October 2014. It remains the current policy document at this time.

Catalogue of Encouraged Industries in Western China

This Catalogue is formulated for the purpose of deeply implementing the western development strategy and promoting the industrial restructuring and the development of industries with local advantages in Western China.

This Catalogue consists of two parts, with one part on encouraged industries included in China's existing catalogues of industries, and the other on encouraged industries newly added in Western China.

In principle, this Catalogue apply to all kinds of enterprises that engage in production and business operation in Western China, among which, foreign-invested enterprises shall be governed by the Catalogue of Industries for Guiding Foreign Investment and the Catalogue of Priority Industries for Foreign Investment in Central and Western China.

I. Encouraged Industries Included in China's Existing Catalogues of Industries

- Encouraged industries included in the Catalogue for Guiding Industrial Restructuring (Version 2011) (Amended) (Decree of the National Development and Reform Commission [2013] No. 21)
- Encouraged industries included in the Catalogue of Industries for Guiding Foreign Investment (Amended in 2011) (Decree of the National Development and Reform Commission and the Ministry of Commerce [2011] No. 12)
- Industries in Western China as specified in the Catalogue of Priority Industries for Foreign Investment in Central and Western China (Amended in 2013) (Decree of the National Development and Reform Commission and the Ministry of Commerce [2013] No. 1)

In the case of amendments to the aforesaid catalogues, the new version will prevail.

II. Encouraged Industries Newly Added in Western China

Encouraged industries that are newly added in Western China are listed by provinces, autonomous regions or centrally-municipalities, and will be amended in due time in light of actual situations.

1 Chongqing Municipality

- Intensive processing of ferrous and non-ferrous metals: materials used in household appliances and the information industry; high-strength and high-precision wide plates used for automobiles and light alloy materials used for castings and forgings; magnesium alloy highly processed products; metal-base power and surface treatment new materials; and manganese base and other new materials
- 2. Production of engineering plastics and chemical new materials (excluding projects restricted or prohibited projects in the Catalogue for Guiding Industrial Restructuring)
- 3. Intensive processing of celestite and other non-metal ores

- 4. Development and production of new energy-saving, sound-proofing and fireproofing doors and windows as well as their accessories
- 5. Production of energy-saving and environmental protection materials and prefabricated building components and parts
- 6. Development and manufacturing of nuclear equipment, and high-precision nuclear instruments and meters
- 7. R&D and manufacturing of complete sets of equipment and devices (gas storage cylinders, compressors, gasholders, deep dehydration equipment, devulcanizers, condenser pipes, oil-water separators, etc.) for CNG gas stations
- 8. R&D and manufacturing of high-voltage power transmission and control equipment
- Manufacturing of key components for household appliances such as compressors, electric motors, frequency converters and magnetic control, which reach 1-level energy efficiency
- 10. Development of freshwater source, ground source and sewage source heat pump technologies and equipment manufacturing
- 11. Development of clock timing, jewelcrafting and other precision machining technologies and equipment manufacturing
- 12. Manufacturing of large recreation facilities
- 13. Manufacturing of complete automobiles and special purpose vehicles (excluding ordinary semi-trailers, dumpers, tank trucks, van vehicles and box/stake trucks)
- 14. Manufacturing of complete motorcycles and their important components and parts
- 15. R&D and production of marine gearboxes, and marine fuel injection equipment, superchargers, connecting rods, thin-wall bearing bushes, injection control units and other key component and parts, and production of high holding power anchors with the integration of casting and forging
- 16. Production of high-end glassware with not more than 0.02% of Fe2O3
- 17. Development and production of teaching aids and apparatus
- 18. Construction and operation of water supply projects for rural residents (including the extension of urban water supply facilities to rural areas)
- 19. Highway passenger transportation
- 20. Operation of civil airports (production and operating activities in connection with airport operation
- 21. R&D and manufacturing of laptops, complete communication products and key components and parts
- 22. R&D and application of cloud computing solutions
- 23. Upgrading of the tri-network integration service platform, communication and cable TV network and equipment manufacturing
- 24. Broadband network construction and operation
- 25. Warehousing, shipping, freight forwarding, packaging, loading and unloading, transport, distribution processing, delivery, information processing and other integration services
- 26. Small loan financial services for agriculture, rural areas and farmers, small and micro enterprises, and individual businesses
- 27. Financial outsourcing services, and payment services for non-financial institutions
- 28. Operation of medical institutions

- 29. Trainings of arts and skills (music, performing arts, painting, design and traditional handicraft)
- 30. R&D and application of pollution treatment and remediation technologies in sites of industrial enterprises
- 31. Development and application of the technologies for comprehensive utilization of industrial waste heat, excess pressure, pressure difference and emitting gas
- 32. Development and application of rural domestic sewage, rubbish and livestock manure

2 Sichuan Province

- 1. R&D and application of agriculture product quality and safety testing technologies, and equipment manufacturing
- Construction and operation of storage, preservation, drying and other primary processing facilities in agricultural producing areas (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 3. Efficient solar cell module technology development and production
- 4. Development and production of nuclear grade graphite
- 5. High-quality titanium raw materials AMT and the application thereof (CaO+MgO≤1.5%); titanium production technologies with annual production of more than 60,000 tons (electric furnace capacity≥25000kVA)
- Development and application of vanadium titano-magnetite efficient and clean separation and extraction technologies (vanadium titano-magnetite mining and recovery rate, oildressing recovery rate, and comprehensive utilization rate shall conform to the relevant standards of the State)
- 7. Intensive processing of titanium materials
- 8. Development and application of carbon black new technologies with annual production of more than 40,000 tons
- Development and application of vanadium oxide cleaner production technologies with annual production of more than 3,000 tons (zero emission of waste water or waste residue); and development and application of vanadium products AMT (vanadium-base alloy, vanadium-base function materials and vanadium fine chemical products)
- 10. Development and application of special purpose titanium dioxide AMT with annual production of more than 10,000 tons (specially used in chemical fiber, papermaking, printing ink and plastics, limited to the renovation of existing devices)
- 11. Development and production of grapheme and nanocarbon materials, graphite with fine structure, charcoal, cathode of lithium batteries and other new carbon materials
- 12. Ethylene produced by using bioethanol (except the use of grain as raw materials)
- 13. Development and manufacturing of high-precision nuclear equipment and meters
- 14. R&D and manufacturing of complete sets of equipment and devices (gas storage cylinders, compressors, high-pressure underground gas storage wells, gasholders, deep dehydration equipment, devulcanizers, condenser pipes, oil-water separators, etc. of CNG automobiles) for CNG gas stations, and manufacturing and application of complete sets of equipment and devices for LNG gas stations
- 15. Development and manufacturing of wireless test instruments
- 16. Production of SCR denitration catalysts and SCR flue gas denitration equipment such as

- themal power generation, cement and steel
- 17. Manufacturing of large recreation facilities
- 18. Manufacturing of seed production and processing machinery and drying equipment
- 19. Repair and assembly of urban tracks and metro vehicles
- 20. Manufacturing of complete automobiles, and manufacturing of special purpose vehicles (excluding ordinary semi-trailers, dumpers, tank trucks, van vehicles and box/stake trucks)
- 21. Development and production of teaching aids and apparatus
- 22. Construction and operation of water supply projects for rural residents (including the extension of urban water supply facilities to rural areas)
- 23. Highway passenger transportation
- 24. Operation of civil airports (production and operating activities in connection with airport operation
- 25. Upgrading of the tri-network integration service platform, communication and cable TV network and equipment manufacturing
- 26. Broadband network construction and operation
- 27. R&D and application of cloud computing solutions
- 28. Development and application of TCM traceable electronic code technologies
- 29. Financial outsourcing services
- 30. Small loan financial services for agriculture, rural areas and farmers, small and micro enterprises, and individual businesses
- 31. Development and application of financial modernized technologies (mobile payment, electronic bills, financial IC cards, etc.)
- 32. Operation of medical institutions
- 33. Pilot training
- 34. Development and application of the technologies for comprehensive utilization of industrial waste heat, excess pressure, pressure difference and emitting gas
- 35. Development and manufacturing of scout, protective, disinfecting and washing and other anti-chemical emergency equipment in nuclear, chemical, biological and other fields
- 36. Development and application of rural domestic sewage, rubbish and livestock manure

3 Guizhou Province

- Production of rock drill tools used in high-power hydromantic trolleys and steel in rock drill tools
- Manufacturing of superior carbon steel wire and the products thereof (intensity≥1670N/ mm2)
- Development and production of new products in manganese intensive processing (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 4. Development and production of high-performance aluminum alloy products
- 5. Development of new processes and technologies for titanium smelting (producing titanium by directly using high titanium slag and rutile electrolysis)
- 6. Intensive processing of titanium materials and development and production of new titaniferous fine chemical products
- 7. Development of new technological equipment and new products in intensive processing of titanium

- 8. Development and production of high-performance magnesium alloy
- 9. Comprehensive utilization of resources in integration of "phosphorus-electricity-chemical engineering" (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 10. Development and production of new products in intensive processing of barite
- 11. Fine processing and comprehensive development and utilization of dolomite
- 12. Production of adipic acid and nylon 66
- 13. Development of fine chemical products (essence, flavors, chemical drugs, and intermediates of chemical products) by using natural plants
- 14. Protection and sustainable utilization of animal and plant medicinal resources (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 15. R&D and manufacturing of high-pressure plunger-type hydraulic pumps, hydraulic motors and other hydraulic basic parts
- 16. R&D and manufacturing of gas turbines with the power of more than 4 MW
- 17. R&D and manufacturing of hydrodynamic transmissions
- 18. R&D and manufacturing of large extraction devices (with the volume 50-3500L, the pressure 9.8-35Mpa and the temperature 10-85)
- 19. R&D and manufacturing of Development and manufacturing of agricultural machinery suited for western mountainous areas that are lightweight, durable and low-loss small and medium-sized equipment for plowing, planting and harvesting
- 20. Manufacturing of complete sets of coal ash storage, transport and utilization equipment
- 21. Manufacturing of complete automobiles, and manufacturing of special purpose vehicles (excluding ordinary semi-trailers, dumpers, tank trucks, van vehicles and box/stake trucks)
- 22. Processing and production of crafts of ethnic minorities
- 23. Construction and operation of water supply projects for rural residents (including the extension of urban water supply facilities to rural areas)
- 24. Highway passenger transportation
- 25. Operation of civil airports (production and operating activities in connection with airport operation
- 26. Broadband network construction and operation
- 27. R&D and application of cloud computing solutions
- 28. Small loan financial services for agriculture, rural areas and farmers, small and micro enterprises, and individual businesses
- 29. Financial outsourcing services
- 30. Operation of medical institutions
- 31. Development and application of rural domestic sewage, rubbish and livestock manure

4 Yunnan Province

- 1. Cultivation of flowers and ornamental seedings
- 2. Development and application of smart micro-grid technologies by relying on distributed power
- 3. Efficient solar cell module technology development and manufacturing

- 4. Production of anti-seismic steel bars (HRB500E) with the strength of more than 500MPa
- 5. Optimization research and application of the technologies for replacing traditional reducing agents with biomass charcoal in the production of industrial silicon
- 6. Development and intensive processing of new products of lead-base alloy and zinc-base alloy
- 7. Comprehensive recycling and intensive processing of rare and precious metals
- 8. Development of new technologies and new processes and intensive processing in the production of titanium sponge
- 9. Development and production of titanium material and titanium alloy new products
- 10. Development and production of fine chemical products of petroleum (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 11. Development and production of water soluble fertilizers, microelement fertilizers, microbial fertilizers and other new fertilizers
- 12. Ethylene produced by using bioethanol (except the use of grain as raw materials)
- 13. Production of building materials with high volume of coal ash: production of sintered bricks with 70% or more volume of coal ash, production of ceramsite products with 85% or more volume of coal ash, production of concrete with 25% or more volume of coal ash, and production of other building materials (excluding cement) with 30% or more volume of coal ash
- 14. Development and production of new thermal insulation technologies and materials (steam accumulation technology, regenerative tempering air burning technology, micro-nano high temperature far infrared energy-saving coatings, heat supply network insulation, etc.)
- 15. R&D and manufacturing of power generation, transmission, transformation, supply, distribution and control equipment used under special environments (altitude, humid and hot, arctic-alpine, heavily polluted and other environments), plateau-type electrical appliances, and R&D and manufacturing of complete sets of small and medium-sized hydropower equipment
- 16. Manufacturing of complete sets of advanced and applicable pharmaceutical and biological equipment
- 17. Development and manufacturing of modern agricultural machinery suite for plateau mountain areas such as tractors, cultivators, mini-tillers and rice, corn, potato and cane harvesters
- 18. Manufacturing of complete automobiles, and manufacturing of special purpose vehicles (excluding ordinary semi-trailers, dumpers, tank trucks, van vehicles and box/stake trucks)
- 19. Intensive processing of cane sugar and comprehensive utilization of blackstrap, bagasse, sugarcane leaves, lime sludge, alcohol waste water and other by-products (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 20. Processing and production of crafts of ethnic minorities
- 21. Construction and operation of water supply projects for rural residents (including the extension of urban water supply facilities to rural areas)
- 22. Highway passenger transportation
- 23. Operation of civil airports (production and operating activities in connection with airport operation

- 24. R&D and application of cloud computing solutions
- 25. Broadband network construction and operation
- Construction and operation of port logistics facilities (warehouses, storage yards, loading, unloading and handling tools, multimodal transport and transfer facilities and the logistics information platform)
- 27. Small loan financial services for agriculture, rural areas and farmers, small and micro enterprises, and individual businesses
- 28. Trainings of arts and skills (music, performing arts, painting, design, jewel and jade authentication and traditional handicraft)
- 29. Operation of medical institutions
- 30. Production of magnetic materials by using steel rolling scale
- 31. Development and application of plateau lake water pollution control technologies
- 32. Development and application of the technologies for comprehensive utilization of industrial waste heat, excess pressure, pressure difference and emitting gas
- 33. Development and application of rural domestic sewage, rubbish and livestock manure

5 Tibet Autonomous Region

- 1. Production and processing of characteristic agricultural and animal products
- Research on exploration, development and utilization of combustible ice in plateaus and frozen tundra
- 3. Testing, construction and operation of solar photovoltaic power generation systems
- 4. Comprehensive development and utilization of salt lake resources (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 5. Processing of Tibetan special food and drinks (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 6. Processing and production of crafts of ethnic minorities
- 7. Construction and operation of water supply projects for rural residents (including the extension of urban water supply facilities to rural areas)
- 8. Highway passenger transportation
- 9. Operation of civil airports (production and operating activities in connection with airport operation
- 10. Broadband network construction and operation
- Construction and operation of port logistics facilities (warehouses, storage yards, loading, unloading and handling tools, multimodal transport and transfer facilities and the logistics information platform)
- 12. Operation of medical institutions
- 13. Development and application of rural domestic sewage, rubbish and livestock manure

6 Shaanxi Province

- 1. Construction and operation of back-pressure cogeneration units
- 2. Comprehensive utilization of multi-element paragenic ore resources
- 3. Development and production of high-performance magnesium alloy

- 4. Intensive processing of titanium materials
- 5. On-the-spot intensive processing of organic chemical materials produced by using large oil refining, ethylene and aromatic hydrocarbon production installations (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 6. Technology development and production of new and environment-friendly oil field chemicals (carbon dioxide and new reagent fuel and air scavengers)
- 7. Production of fine chemical products such as polyformaldehyde, dimethylformamide and polyvinyl alcohol with annual production of 60,000 tons or more
- 8. Development and production of new concretes (fiber concrete, pervious concrete, planting concrete, recycled aggregate concrete, and waste rubber powder concrete)
- 9. Development and production of efficient bioreactors, high-density culture technology, and adjuvants, suspension culture, fermentation culture and other biological products
- 10. Development and manufacturing of biochips and the equipment and software in acquisition and handling of data relating to biochips
- 11. Production of polylactic acid, polyhydroxyalkanoic acid, polyamino acid, polyorganic acid and other biodegradable materials, environment-friendly materials which blend starch with degradable high-polymer materials, new carbon absorbing materials and biochemicals (including bio-ethylene, lactic acid, 1,3-propylene glycol, butanol, butanedioic acid, succinic acid, and organic acid products with all kinds of special features, all kinds of solvents and pharmaceutical intermediates) by using biomass
- 12. R&D and manufacturing of key pumps, control valves and regulating valves used on megaton large ethylene and ten-millions-ton large oil refining equipment which are used in major coal chemical, petrochemical and power plants
- 13. R&D and manufacturing of hydrodynamic retarders
- 14. Development and application of blade roll forging technologies and impeller vacuum treatment technologies used in turbine machinery rotors
- 15. Development and manufacturing of high-precision nuclear instruments and meters
- 16. Manufacturing of complete sets of energy saving, environmental protection and energy efficiency comprehensive utilization equipment and system services during industrial processes: complete sets of large isothermal efficient and energy-saving equipment and system services, complete sets of energy-efficient comprehensive utilization equipment and system services for large nitric acid devices, development and manufacturing of complete sets of devices and technologies for large efficient axial flow compressors, complete sets of industry-driven energy-efficient equipment and system services, and complete sets of efficient energy recovery equipment and system services
- 17. Manufacturing of efficient micro-emission coal-fired boilers (superior to national standards)
- 18. Development of freshwater source, ground source and sewage source heat pump technologies and equipment manufacturing
- 19. Micro-power consumption air conditioning systems exceeding the energy efficiency Level 1 and specially developed and manufactured for rural markets
- 20. Manufacturing of large recreation facilities
- 21. Repair and assembly manufacturing of urban tracks and metro vehicles
- 22. Manufacturing of complete automobiles, and manufacturing of special purpose vehicles

- (excluding ordinary semi-trailers, dumpers, tank trucks, van vehicles and box/stake trucks)
- 23. Development and production of fresh water plates, plastic steel plates, compound built-up plates and other new plates
- 24. Development and production of teaching aids and apparatus
- 25. Construction and operation of water supply projects for rural residents (including the extension of urban water supply facilities to rural areas)
- 26. Highway passenger transportation
- 27. Operation of civil airports (production and operating activities in connection with airport operation
- 28. Upgrading of the tri-network integration service platform, communication and cable TV network and equipment manufacturing
- 29. Broadband network construction and operation
- 30. Construction of large and super-large data centres
- 31. Warehousing, shipping, freight forwarding, packaging, loading and unloading, transport, distribution processing, delivery, information processing and other integration services
- 32. Small loan financial services for agriculture, rural areas and farmers, small and micro enterprises, and individual businesses
- 33. Operation of medical institutions
- 34. R&D and application of the platforms for digitalized and network-based demonstration of cultural resources
- 35. Trainings of arts and skills (music, performing arts, painting, design and traditional handicraft)
- 36. Development and application of the technologies for exploration, monitoring and treatment of geological disasters
- 37. Development and application of rural domestic sewage, rubbish and livestock manure

7 Gansu Province

- 1. Cultivation of quality wine grapes and wine making
- 2. Construction and operation of backpressure cogeneration units
- 3. Construction and operation of solar energy system
- 4. Construction and operation of wind farm
- 5. Development and application of technologies using natural gas to substitute heavy oil, diesel and coal in deep processing of chemical and non-ferrous metal materials (except projects restricted or prohibited by natural gas industrial policies)
- 6. Development and production of internals of high temperature gas cooled reactor and nuclear-related carbon graphite materials
- 7. Development and production of coal materials for energy-efficient, environmental and large submerged arc furnace
- 8. Development and production of high-performance magnesium, titanium alloy
- 9. Development and production of nickel, copper, cobalt and precious metal powder materials
- 10. Development and production of materials for rechargeable Ni-Co battery
- 11. Carbonyl metallurgical technology and development and application of nickel carbonyl
- 12. Production of electronic grade HF

- 13. Application of modification techniques of asbestos wet flotation
- 14. Development and production of new-type carbon materials including grapheme, nano carbon, fine structure graphite, bio-carbon and negative of lithium battery
- 15. Production of construction materials with high mixture of fly ash: fried brick of 70% mixture or more; ceramisite of 85% mixture or more; concrete of 25% mixture or more, and other products of 30% mixture or more (except cement)
- 16. Manufacture of machinery for seed production and processing, drying equipment
- 17. Manufacture of high-performance vacuum equipment: for vacuum obtaining, for modified surface of vacuum materials, vacuum furnace, containers for low-temperature storage and transport, vacuum special equipment
- 18. Development and manufacture of heavy ion cancer-treatment equipment
- 19. Manufacture of waste energy and heat boiler, biomass boiler, boiler for waste burning, and high-parameter, large-volume, energy-efficient boiler (kiln)
- 20. Development and manufacture of green coating set equipment: equipment for vacuum ion coating, magnetron sputtering coating, evaporation coating, ion implantation and ion cleaning
- 21. Manufacture of high efficiency motor and its control system (low-voltage, three-phase asynchronous motor with a rated power of 0.55KW-355KW and a rated voltage of 690V or below; (high-voltage, three-phase asynchronous motor with a rated power of 355KW-25000KW and a rated voltage of 6KV or10KV; high efficiency permanent magnet servo motor)
- 22. Manufacture of electricity-saving equipment for grid system (with a 10-20% reduction in no-load loss and 5% reduction in load loss compared with similar products)
- 23. Manufacture of complete vehicle and special vehicle (excluding common trailer, dump truck, tank truck, van and stake truck)
- 24. Processing of Halal food
- 25. Development and application of low temperature drying of vegetables based on multiple heat sources of solar energy
- 26. Construction and operation of water supply project for rural residents (including extension of urban water facilities)
- 27. Road passenger transport
- 28. Operation of civil airport (production and operation activities directly related to airport operation)
- 29. Construction and operation of wideband network
- 30. Financial service of small-sum loans serving "agriculture, rural areas and farmers", small and micro enterprises and self-employed businessmen
- 31. Operation of medical institution
- 32. Development and application of demonstration platform of digitalized and networked cultural resources
- 33. New-type oil field cementing reducing agent for fly ash production
- 34. Development and application of leach residue technologies of blast furnace detoxifying chrome
- 35. Development and application of environmental technologies on treatment of sanitary sewage, garbage and livestock excrements in rural areas

8 Qinghai Province

- 1. Cultivation and processing of psammophytes
- 2. Construction and operation of backpressure cogeneration units
- 3. Construction and operation of solar power system
- 4. Construction and operation of wind farm
- Comprehensive utilization, series products development and by-product utilization of salt lake resources including potassium, sodium, magnesium, lithium, boron, strontium, bromine, iodine, rubidium and caesium (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 6. Production of potassium hydroxide with more than 50,000 tons a year on a single line
- 7. Production of hydrogen chloride from desorption of diluted hydrochloric acid
- 8. Production of anhydrous magnesium chloride from continuous dehydration of MgCl2'6H2O
- 9. Development and production of high-performance magnesium alloy
- 10. Application of modification techniques of asbestos wet flotation
- 11. Recycled utilization of solid waste, by-products from production process of various inorganic salts
- 12. Exploration, research and development of deep confined underground brine
- 13. Development and manufacture of equipment for road maintenance and repair
- 14. Development and manufacture of desilting equipment for large diameter pipelines (utility tunnel) in urban areas
- 15. Manufacture of complete vehicle and special vehicle (excluding common trailer, dump truck, tank truck, van and stake truck)
- 16. Processing of Halal food
- 17. Processing and production of handicrafts with ethnic characteristics
- 18. Construction and operation of water supply project for rural residents (including extension of urban water facilities)
- 19. Road passenger transport
- 20. Operation of civil airport (production and operation activities directly related to airport operation)
- 21. Construction and operation of wideband network
- 22. Operation of medical institution
- 23. Pilot training
- 24. Application and renovation of power-generating technologies using industrial waste heat
- 25. Development and application of environmental technologies on treatment of sanitary sewage, garbage and livestock excrements in rural areas

9 Ningxia Hui Autonomous Region

- Cultivation of quality grapes and wine making
- 2. Development and application of high efficiency coal extraction technologies, development and application of new technologies and equipment for coalfield fire prevention and control
- 3. Construction and operation of backpressure cogeneration units

- 4. Construction and operation of solar energy system
- 5. Construction and operation of wind farm
- 6. Development and application of intelligent mini-grid technologies based on distributed energy sources
- 7. Development and production of new products including microalloyed steel burden and special silicon alloy
- 8. Development and production of wireropes in compliance with GB8918-2006 and with a diameter of 20-60mm
- 9. Development of new techniques and production of new products of rare metal materials including tantalum, niobium, beryllium and titanium
- 10. Development and production of nickel powder, high-performance target for multilayer ceramic capacitor
- 11. Development and production of high-performance magnesium alloy
- 12. Production of series products of vinyl acetate (200,000 tons/ year or more), polyving akohol (60,000 tons/year or more), lime nitrogen and cyanamide (30,000 tons/year or more)
- 13. Production of construction materials with high mixture of fly ash: fried brick of 70% mixture or more; ceramisite of 85% mixture or more; concrete of 25% mixture or more, and other products of 30% mixture or more (except cement)
- 14. Development and manufacture of key pumps, control valves and regulating valves for major coal chemical, petrochemical and power station equipment for 30/52 (above the annual output of 300,000 tons of synthesis ammonia, 520,000 tons of urea) large-sized fertilizer, 1million ton-level ethylene and 10 million ton-level oil refinery projects.
- 15. Manufacture of traction transformer for electrified railway
- 16. Manufacture of complete vehicle and special vehicle (excluding common trailer, dump truck, tank truck, van and stake truck)
- 17. Technology development and equipment manufacture for clean coals including gasified and liquefied coals
- 18. Processing and production of Chinese wolfberry products (juice, fruit wine, oil capsule and other health care food)
- 19. Processing of Halal food
- 20. Processing and production of handicrafts with ethnic characteristics
- 21. Deep processing of high-end dairy products including milk protein and casein
- 22. Development and production of color polyester from melt direct spinning and chip spinning.
- 23. Construction and operation of water supply project for rural residents (including extension of urban water facilities)
- 24. Road passenger transport
- 25. Operation of civil airport (production and operation activities directly related to airport operation)
- 26. Construction and operation of wideband network
- 27. Construction and operation of large or extra-large data center
- 28. Operation of medical institution
- 29. Software outsourcing and cultural creative industry targeting Muslim areas and Arabian countries

- 30. Technological renovation for energy efficiency of arc furnace and recycling (power generation) of waste heat
- 31. Development and application of environmental technologies on treatment of sanitary sewage, garbage and livestock excrements in rural areas

10 Xinjiang Uygur Autonomous Region (including Xinjiang Production and Construction Corps)

- 1. Plant cultivation and utilization based on biomass energy in desert areas with a size of 500mu or more
- 2. Cultivation of quality grapes and wine making
- 3. Development and application of extraction technologies for ultra-thick coal seam (a single layer as thick as more than 50 meters)
- 4. Construction and operation of backpressure cogeneration units
- 5. Construction and operation of wind farm
- 6. Construction and operation of solar energy system
- 7. Development and application of intelligent mini-grid technologies based on distributed energy sources
- 8. Development and manufacture of uranium ore extraction equipment, development and application of in-site leaching technology
- Development and application of new technologies for rare metal exploration, orderly extraction and processing
- 10. Asphalt production through polymer modification
- 11. In-site deep processing of organic chemical materials for large production facilities of refined oil, ethylene and aromatic hydrocarbons (excluding projects restricted or prohibited by the Catalogue for Guiding Industrial Restructuring)
- 12. Development and application of technologies for production of polyvinyl chloride (PVC) using mercury-free catalyst
- 13. Production of polyoxymethylene (60,000 tons/year or more), GTL (100,000 tons/year or more)
- 14. Production of non-clay perforated brick and air brick using coal gangue, shale, etc. with an annual output of 30 million standard bricks or more
- 15. Construction and operation of environment featured lime gas shaft kiln, double-fuel shaft kiln, shaft kiln with pulverized coal preparation system and fueled with pulverized coal, lime rotary kiln with a diameter of 2.5m or above as well as carbon-lime mixture mechanical shaft kiln with an output of 100,000 tons/year or more
- 16. Development and manufacture of wind turbine generator control system, key components of such generator including new-type generator, high speed blade, full power converter, variable plasma controller, step-up gear box, principal axis and bearing, as well as construction machinery for offshore wind power projects
- 17. Development and manufacture of equipment for application of dry air energy
- 18. Professional services on basic techniques including casting, forging, heat treatment and surface treatment (excluding projects restricted or prohibited by the Catalogue for Guiding Industrial Restructuring)

- 19. Development and application of mechanization technologies for cultivation and harvesting of crops including cotton, wheat, beans, tomato, pepper, sugar beet and date.
- 20. Development and manufacture of special equipment for cotton stalk harvesting
- 21. Manufacture of large-sized entertainment facilities
- 22. Manufacture of complete vehicle and special vehicle
- 23. Extraction and deep processing of special non-metallic mineral materials including bentonite and vermiculite, development and application of related technologies and equipment
- 24. Development and production of silicon carbide wafer for third-generation semiconductor
- 25. Sugar production line with a daily processing capacity of more than 3,000 tons of sugar beet
- 26. Production of high-end glassware containing not more than 0.02% Fe2O3
- 27. Research and production of teaching devices
- 28. Processing and production of handicrafts with ethnic characteristics
- 29. Design, production and sale of performance wear and musical instruments with ethnic characteristics
- 30. Construction and operation of water supply project for rural residents (including extension of urban water facilities)
- 31. Road passenger transport
- 32. Operation of civil airport (production and operation activities directly related to airport operation)
- 33. Construction and operation of wideband network
- 34. Construction and operation of port logistics facilities (warehouse, storage yard, handling tools, multimodal transport/transfer facilities, logistics information platform, etc.)
- 35. Financial service of small-sum loans serving "agriculture, rural areas and farmers", small and micro enterprises and self-employed businessmen
- 36. Operation of medical institution
- 37. Art and skill training (ethnic music, performance, painting, design and traditional handicraft)
- 38. Development and application of technologies for comprehensive utilization of industrial waste heat, waste pressure, differential pressure and product gas
- 39. Development and application of technologies for comprehensive utilization of by-product resources of agriculture and forestry including grain, cotton stalks and fruit wood
- 40. Development and application of environmental technologies on treatment of sanitary sewage, garbage and livestock excrements in rural areas (including in the Corps and company)

11 Inner Mongolia Autonomous Region

- 1. Cultivation and processing of psammophytes
- 2. Development and production of composite living bacteria preparation and microbial additives for fodder
- 3. Production of organic-inorganic compound fertilizer
- 4. Construction and operation of backpressure cogeneration units
- 5. Construction and operation of solar energy system
- 6. Construction and operation of wind farm
- 7. Development and application of intelligent mini-grid technologies based on distributed energy sources

- 8. Biomass power generation through high-oil microalgae
- 9. Development and production of high-performance rare-earth permanent magnet, luminescent, hydrogen storage and catalytic materials
- 10. Development and application of new materials of germanium and uranium: manufacture of series civil nuclear fuel units for heavy water reactor, pressurized water reactor and gas cooled reactor, development and application of thorium resources, production of high-purity germanium and optical fiber communication
- 11. Production of refined chemical products including polyformaldehyde (60,000 tons/year or more), dimethyl formamide (60,000 tons/year or more) and polyving akohol (60,000 tons/year or more)
- 12. Deep processing of single set anhydrous coal tar (150,000 tons/year or more)
- 13. Development and application of technologies for production of polyvinyl chloride (PVC) using mercury-free catalyst
- 14. Production of refined products of fluorine chemical industry including hexafluoroethane (excluding projects restricted or prohibited by the Catalogue for Guiding Industrial Restructuring)
- 15. Development and production of new-type carbon materials including grapheme, nano carbon, fine structure graphite, bio-carbon and negative of lithium battery
- 16. Production of series fire-proof materials with coal series kaolinite substituting high bauxite and other non-metallic fire-proof materials and products
- 17. Production of large-diameter, high-pressure, thick-wall boiler tubes
- 18. Development and manufacture of rare earth permanent magnet NMR image equipment with a magnetic induction intensity of more than 0.3T
- 19. Manufacture of small bower for pasturing households
- 20. Manufacture of complete vehicle and special vehicle (excluding common trailer, dump truck, tank truck, van and stake truck)
- 21. Manufacture of non-road mining dump truck with a load of 300 tons or more
- 22. Processing of fluffy cotton
- 23. Processing and production of handicrafts with ethnic characteristics
- 24. Construction and operation of water supply project for rural residents (including extension of urban water facilities)
- 25. Road passenger transport
- 26. Operation of civil airport (production and operation activities directly related to airport operation)
- 27. Construction and operation of wideband network
- 28. Construction and operation of large or extra-large data center
- 29. Construction and operation of port logistics facilities (warehouse, storage yard, handling tools, multimodal transport/transfer facilities, logistics information platform, etc.)
- 30. Operation of medical institution
- 31. Pilot training
- 32. Development and application of environmental technologies on treatment of sanitary sewage, garbage and livestock excrements in rural areas

12 Guangxi Zhuang Autonomous Region

- Development and application of technologies of crop interplanting and planting in autumn/ winter
- 2. Development and application of new technologies for quality test of agricultural products
- 3. Development and production of high-performance rare-earth permanent magnet, luminescent, hydrogen storage and catalytic materials
- 4. Comprehensive utilization of low-grade, hard-to-dispose bauxite
- 5. Technology development for and production of high-performance aluminum alloy deep processing products
- 6. Technology development for and production of high purity indium and indium base alloy materials
- 7. Development and deep processing of new materials of tin base alloy
- 8. Ethylene production with bioethanol (except with grain as raw material)
- 9. Development and production of refined petrochemical products (excluding projects restricted or prohibited in the Catalogue for Guiding Industrial Restructuring)
- 10. Development of advanced technologies for and production of electrical components, alkaline manganese battery, lithium manganese battery and stainless steel using electrolytic manganese metal as raw material
- 11. Manufacture of complete equipment and devices for CNG station (CNG gas cylinder, long tube glass fiber winding cylinder, compressor, high pressure underground gas storage well, deep dehydration device, devulcanizer, condenser pipe, oil-water separator), manufacture of complete equipment and devices for LNG station (including LNG cylinder)
- 12. Development and manufacture of medium and small sized agricultural machinery including sugar cane planter
- 13. Manufacture of excavator (15 tons and above), loader and electric fork-lift (3 tons and above), internal-combustion forklift (3 tons and above), hydraulic roller, hydraulic spreader, land leveler, drive axle for loader, hydraulic components for engineering machinery, hydraulic pipelines and hydraulic set units, and electric control system for engineering machinery
- 14. Manufacture of complete vehicle and special vehicle (excluding common trailer, dump truck, tank truck, van and stake truck)
- 15. Tractor fit for hills and mountain areas, medium and small sized agricultural machinery for cultivation and harvesting, development and production of agricultural engineering machinery and its key parts for water conservancy in rural areas, construction of rural roads, etc.
- 16. Cocoon and silk printing/dyeing, deep processing of garments
- 17. Processing and production of handicrafts with ethnic characteristics
- 18. Comprehensive utilization of by-products including waste molasses, bagasse, sugarcane leaves, lime sludge and alcohol slops (excluding projects restricted or prohibited by the Catalogue for Guidance of Industrial Structure Adjustment)
- 19. Development and application of technologies using wooden waste to produce directional structure plate
- 20. Recycled and comprehensive utilization of cocoon industry resources

- 21. Construction and operation of water supply project for rural residents (including extension of urban water facilities)
- 22. Road passenger transport
- 23. Operation of civil airport (production and operation activities directly related to airport operation)
- 24. Construction and operation of wideband network
- 25. Development and application service on cloud computing solutions
- 26. Construction and operation of port logistics facilities (warehouse, storage yard, handling tools, multimodal transport/transfer facilities, logistics information platform, etc.)
- 27. Operation of medical institution
- 28. Art and skill training (music, performance, painting, design and traditional handicraft)
- 29. Financial service of small-sum loans serving "agriculture, rural areas and farmers", small and micro enterprises and self-employed businessmen
- 30. Comprehensive utilization of silt from urban water system
- 31. Development and application of technologies for comprehensive utilization of industrial waste heat, waste pressure, differential pressure and product gas
- 32. Development and application of environmental technologies on treatment of sanitary sewage, garbage and livestock excrements in rural areas