

## IL CATALOGO SETTORIALE DEGLI INVESTIMENTI STRANIERI

In Cina gli investimenti esteri, in base al settore o al tipo di attività, sono soggetti ad una diversa disciplina: alcuni sono incoraggiati, e quindi non prevedono particolari limitazioni, altri sono ristretti, pertanto potranno essere effettuati solo rispettando certe condizioni, altri ancora sono proibiti.

Di solito la forma di limitazione più frequente è rappresentata dall'obbligo di aver un *partner* locale con una percentuale di quote societarie minima ben definita (ad esempio nel settore della produzione dei mezzi di trasporto è obbligatorio avere un *partner* cinese con non meno del 50% delle quote). In questi settori non sarà pertanto possibile scegliere un investimento interamente straniero (*WFOE*).

Pertanto, prima di decidere la forma dell'investimento occorre verificare nel *Catalogue for the Guidance of Foreign Investment Industries*, se il settore industriale del progetto di investimento ricade tra quelli nei quali gli investimenti stranieri sono incoraggiati, ristretti o proibiti.

La versione in vigore del Catalogo è stata promulgata il 31 ottobre 2007 dalla *National Development and Reform Commission* e dal *Ministry of Commerce*. Il Catalogo divide i settori per gli investimenti stranieri in tre categorie: **incoraggiati**, **ristretti**, **proibiti**. La categoria degli investimenti **permessi** è residuale: al suo interno sono inclusi tutti quegli investimenti non menzionati nelle categorie precedenti.

I progetti incoraggiati possono beneficiare di procedure di approvazione più semplici, di incentivi per i dazi doganali e per l'IVA sulle importazioni. I progetti in settori ristretti, in generale, devono essere approvati dalle autorità di livello superiore, perciò le autorizzazioni sono più difficili da ottenere.

Indichiamo di seguito i principali settori incoraggiati, ristretti e proibiti ai sensi del Catalogo 2007 e ancora a seguire il Catalogo completo originale in lingua inglese.

### Settori incoraggiati

I settori incoraggiati in gran parte includono le tecnologie per il risparmio di energia e di materie prime, che promuovano l'agricoltura o necessarie per lo sviluppo economico della Cina.

Il Catalogo espone oltre 250 attività e settori incoraggiati, tra questi evidenziamo:

- ricerca nelle tecnologie agricole;
- ricerca e sfruttamento di petrolio e gas naturale (limitatamente alle Joint Venture);
- lavorazione e stoccaggio di alcuni prodotti alimentari;
- produzione di etilene superiori a 800.00 tonnellate all'anno (limitatamente alle Joint Venture);
- produzione e progettazione di certi prodotti e leghe plastiche;
- produzione di nuovi tipi di materiali da costruzione;
- fabbricazione di alcuni componenti per veicoli;
- centri di ricerca e sviluppo;
- produzione di energia solare, riscaldamento e sistemi di essiccazione.

Per maggior informazioni:

<http://www.investment.gov.cn/2008-10-27/1223859157474.html>

### Settori ristretti

Gli investimenti stranieri sono ristretti per lo piu' nei settori che utilizzano tecnologia obsoleta o dannosi per l'ambiente. Vi sono poi settori economici in cui le attivita' straniere sono limitate in quanto ritenuti strategici oppure di tale rilevanza economica e finanziaria per cui si vuole regolare la presenza degli stranieri negli stessi.

I settori ristretti includono:

- franchising, vendita diretta e vendita per corrispondenza;
- produzione di cereali;
- stampa di pubblicazioni;
- esplorazione e estrazione di metalli preziosi (oro, argento e platino);
- assicurazioni;
- telecomunicazioni.

Per maggior informazioni:

<http://www.investment.gov.cn/2008-10-27/1223859157478.html>

## Settori proibiti

I settori proibiti agli investimenti stranieri sono quelli che mettono in pericolo la sicurezza nazionale, pregiudicano l'interesse pubblico, causano inquinamento, danneggiano le risorse naturali, utilizzano terreni agricoli per fini non agricoli o rappresentano una minaccia per le installazioni militari.

I settori proibiti includono:

- Produzione e sviluppo di sementi geneticamente modificate;
- Lavorazione di tè verde utilizzando processi tradizionali cinesi;
- Fabbricazione di armi e munizioni;
- Costruzione e gestione di centrali elettriche a carbone tradizionali;
- Industria dei giochi *online*;
- Istituti per l'istruzione obbligatoria;
- Canali radiofonici e televisivi.

Per maggior informazioni:

<http://www.investment.gov.cn/2008-10-27/1223859157488.html>

## Catalogue of Encouraged Foreign Investment Industries

### I. Farming, Forestry, Animal Husbandry and Fishery Industries

- (1) Improvement of low and medium yielding field
- (2) Planting, development and production of woody edible oil, ingredient and industrial raw material
- (3) Planting technology, without social effects of pollution, of vegetables (including edible fungus and melon-watermelon), dried fruits, teas and serial development and production of these products
- (4) Development and production of new technology of sugar-yielding crops, fruit trees, forage grass
- (5) Production of flowers and plants, and construction and operation of nursery base
- (6) Planting of rubber, sisals and coffees
- (7) Cultivation of traditional Chinese medicines (limited to equity joint ventures or contractual joint ventures)
- (8) Reusing in fields and comprehensive utilization of straws and stalks of crop, development and production of resources of organic fertilizers
- (9) Planting of forest trees (including bamboo) and cultivation of fine strains of forest trees and cultivation of new breed varieties of polyploid trees and genetically engineered forest trees
- (10) Breeding of aquatic offspring (excluding precious quality varieties peculiar to China)
- (11) Construction and operation of ecological environment protection projects preventing and treating desertification and soil erosion such as planting trees and grasses, etc.
- (12) Breeding of aquatic products, cage culture in deep water, large-scale breeding of aquatic products and breeding of eco-ocean products

### II. Mining and Quarrying Industries

- (1) Prospecting, exploitation and utilization of coal-bed gas (limited to equity joint ventures or contractual joint ventures)

(2) Venture prospecting and exploitation of petroleum, natural gas (limited to equity joint ventures or contractual joint ventures)

(3) Exploitation of oil and gas deposits (fields) with low osmosis(limited to equity joint ventures or contractual joint ventures)

(4) Development and application of new technologies that can increase the recovery factor of crude oil (limited to equity joint ventures or contractual joint ventures)

(5) Development and application of new technologies for prospecting and exploitation of petroleum, such as geophysical prospecting, well drilling, well-logging and downhole operation, etc.(limited to contractual joint ventures)

(6) Prospecting and exploitation of such conventional oil resources as oil shale, oil sand, heavy oil and super heavy oil(limited to contractual joint ventures)

(7) Prospecting, exploitation, and beneficiation of iron ores and manganese ores

(8) Development and application of new technologies for improving the utilance of tailings and the comprehensive utilization of recovery technology of the mine ecology

(9) Prospecting and exploitation of submarine flammable ice(limited to contractual joint ventures)

### III. Manufacturing Industries

#### 1. Farm Products Processing Industry

(1) Development and production of biology feeds, straws and stalks feeds and aquatic feeds

(2) Aquatic products processing, seashell products cleansing and processing, and development of function food made from seaweed

(3) Storage and processing of vegetables, dried fruits, fowl and livestock products

#### 2. Food Manufacturing Industry

(1) Development and production of fond for babies and agedness, as well as function food

(2) Development, production and processing of forest food

(3) Production of natural additive for foodstuff and food ingredients (limited to equity joint ventures or contractual joint ventures)

### 3. Drinks Manufacturing Industry

(1) Development and production of drinks of fruits, vegetables, albumen, tea, coffee and vegetables

### 4. Tobacco Processing Industry

(1) Production of secondary cellulose acetate and processing of tows (limited to equity joint ventures or contractual joint ventures)

(2) Production of tobacco slices in the way of paper making (limited to equity joint ventures or contractual joint ventures)

(3) Production of filter rods (limited to equity joint ventures or contractual joint ventures)

### 5. Textile Industry

(1) Production of special textiles for industrial use with high and new technology

(2) Weaving and dyeing as well as post dressing of high-grade loomage face fabric

(3) Processing of special natural fiber products satisfying the requirement of comprehensive utilization of ecology and resources and environment protection(including other animal fiber, fibrilia, bamboo fiber, mulberry silk and colored cotton other than wool)

(4) Production of clothes with computer integrated manufacturing system

(5) Production of top-grade carpet, embroider and drawnwork product

### 6. Leather, Coat and Feather (Down and Feather) Products Industry

(1) Cleaning processing of leather and fur

(2) Post ornament and processing of leather with new technology

(3) Top-grade leather (sofa leather and car cushion leather)

### 7. Lumber Processing Industry and Wood Bamboo, Bine, Palm, Grass Products Industry

(1) Development and production of new technology and products for the comprehensive utilization of "sub-quality, small wood and fuel wood" and bamboo in the forest area

#### 8. Paper Making and Paper Products Industry

(1) Project based on the mode of integration of forest and paper with an annual production capacity of over 300 thousand tons of chemical wood pulp or an annual production capacity of over 100 thousand tons of chemical mechanical wood pulp (limited to equity joint ventures or contractual joint ventures)

#### 9. Petroleum Refining and Coking Industry

(1) Deep processing of needle coke and coal tar

#### 10. Chemical Raw Material and Products Manufacturing Industry

(1) Production of ethylene with an annual production capacity of 600,000 tons or over (The Chinese party shall hold relative majority of shares)

(2) Processing and manufacturing of derivatives of downstream products of ethylene and comprehensive utilization of ethylene side-products such as C4-C9

(3) Production of ethylene with an annual production capacity of 200,000 tons or over Polyvinyl chloride resin (in the way of ethylene)

(4) Production of further processed products of sodium-process bleaching powder, polyvinyl chloride and organosilicon

(5) Production of basic organic chemical industrial raw materials such as the of benzene, methylbenzenc, dimethylobenzene, etc. and its derivatives

(6) Production of supporting raw materials for synthesized materials: bisphenol-A production and production of propylene oxide in the way of oxidizing propylene with hydrogen peroxide )

(7) Production of synthetic fibre raw materials: precision terephthalic acid, vinyl cyanide, caprolactam, nylon 66 salt and polyurethane elastic fiber

(8) Production of synthetic rubber: liquid butadiene styrene rubber by butadiene method(excluding styrene-butadiene rubber), butyl rubber, isoamyl rubber, polyurethane rubber, acrylic rubber, chlorophydrin rubber, ethylene-propylene-rubber, fluororubber, silicon rubber and other special rubber production)

(9) Production of engineering plastics and plastic alloys: PPO, engineering plastic nylon of 11 and 12, polyurethane, polysulfone, PAR, liquid crystal polymer and other products

(10) Fine chemistry industry: new products and technology for catalytic agent, auxiliary and additive; processing technology for the commercialization of dye (pigment); production of high-tech chemicals for electronics and paper-making, food additives, feed additives, leather chemical products (excluding N,N-dimethylformamide), oil-well auxiliaries, surface active agent, water treatment agent, adhesives, inorganic fibre, inorganic nano material production and deep processing of pigment encapsulation.

(11) Production of low hysteresis and high abrasion carbon black

(12) Production of environment-friendly printing ink and environment-friendly arene-oil

(13) Production of nature spices, synthetic spices and single ion spices

(14) Production of high capability coatings, water automotive coatings and assorted water resin

(15) Production of chlorofluorocarbon substitution

(16) Production of organic fluorine chemical products (excluding CFC/HCFC and tetrafluoroethylene)

(17) Production of fluorine recycling from phosphorus chemicals and aluminum smelting

(18) Production of mass coal chemical industrial products(The Chinese party shall hold the majority of shares)

(19) Development and production of new technology and products for the forestry chemicals

(20) Production of ion film for caustic soda, abio-filtration membrane and function membrane

(21) Development and production of inorganic, organic and biologic films for environment protection

(22) Development and production of new-type fertilizer: biologic fertilizer, high-density fertilizer, compound fertilizer, controlled release fertilizer, compound microbial inoculant, Compound microbial manure, degradation agent for stalks and garbage and microbial preparation of special functions

(23) Development and production of new varieties of effective, safe agriculture chemicals and

pesticides

(24) Development and production of biopesticide and bio-control products: microbial insecticide, microbial fungicide, agricultural antibiotic, insect pheromone, enemy insect and microbial herbicide

(25) Comprehensive utilization and disposal of exhaust gas, discharge liquid, waste residue

(26) Production of organic polymer material: organic silicone modified coatings for ship shell, covering film for plane, rare earth cerium sulphide red dye, lead-free in electronic packages, serials of special sizing agent by photoetching for color Plasma Display Panel, small diameter and large specific surface area superfine fibre, high precision fuel filter paper, Li-ion battery membrane, multi-function compound accessory ingredient for plastic processing, citric acid diglyceride, fludioxonil, cyazofamid

11. Medical and Pharmaceutical Products Industry

(1) Production of new type compound medication of active composition medication (including bulk drug and preparation)

(2) Production of amino acids: serine, tryptophan, histidine, methionine for feed

(3) Production of new anti cancer medication, new cardio-cerebrovascular medication and new nervous system using medication

(4) New type, high effective and economical contraception medication and instrument

(5) Production of new type medication using bioengineering technology

(6) Production of high physiological active medication heterocyclic fluoride containing fluorine, like heterocyclic fluoride, and intermediate

(7) Production of genetic engineering bacterin (AIDS bacterin, third bacterin, contraception bacterin)

(8) Production of biology bacterin

(9) Production of bcg vaccine and poliomyelitis vaccine

(10) Exploitation and production of marine drug

(11) Drug preparation: production of new formulation using new technologies of

sustained-release, release, targeting and percutaneous absorption

(12) Exploitation and production of new type of pharmaceutical adjuvant

(13) Production of biomedicine material and ware(except flesh body, sample, human organ tissue and sample processing)

(14) Production of animal using antibacterial raw material drug

(15) Exploitation and production of animal using antibacterial drug, insect repellent, pesticide, anticoccidial drug and new formulation (16) Production of new diagnosis reagent

## 12. Manufacturing Industry of Chemical Fiber

(1) Production of hi-tech chemical fiber of differential chemical fiber, aramid, carbon fiber, polyethylene of high-strength and high-mode, polyphenylene sulfide(PPS) and so on

(2) Production of Environmental Protection chemical fiber of New Solvent cellulose fiber

(3) Production of new style of fiber and non-fiber polyester: PTT, PEN, PBT

(4) Production of new style fiber material made use of renewable resources, biomass technology: PLA, PDO

(5) Production of polyamide, single line production capacity of 100 ton a day

(6) Production of meridian tyre aramid fiber and tyre cord

## 13. Industry of Plastic Products

(1) Exploitation and production of new technology and new production of agricultural film(photodegradable film and multi-function film)

(2) Digestion and recycle of waste plastics

(3) Exploitation and production of new technology and new production of plastic soft package (high barrier, multi-function film and material)

## 14. Non-metal Mineral Products Processing Industry

(1) Develop and produce new energy-saving, environment-protecting architecture material: lightweight high-intensity and multi-function materials for wall, high-level environment

protecting decorating and finishing materials, high quality water-proof and airproof materials, and effective thermal insulation materials.

(2) Use plastic to replace steel and wood, energy-saving and high-efficient chemical architecture material production.

(3) Produce more than 10,000,000 sq.m. elastomer, plastic changeable asphaltum waterproof coiled materials, high-quality width(more than 2 meters) EPDM waterproof coiled materials and matched materials, durable PVC coiled material, TPO waterproof coiled materials.

(4) Production of screen electromagnetic wave glass, micro-electronics glass base plate, penetrating infrared nonlead glass, electron grade large spec quartz glass pervasion pipe, exceeding two generation and three generation microchannel plate, optic fiber panel and inverse image implement and glass fiber.

(5) Production of glass fibre (product line with technology of wire drawing in tank furnace) and glass fibre reinforced plastic products with an annual capacity of 50,000 tons or more.

(6) Production of sequential fiberglass original silk felt, fiberglass surface felt, micro-electronics fiberglass cloth and thin felt.

(7) Production of coherent fiber bundle and laser medical optic fiber.

(8) Production of sanitation porcelain with an annual production of 1,000,000 pieces or over

(9) Standardization refine of ceramic material and production of high-level decorative materials used for ceramics.

(10) Production of high-level refractory material used in furnaces for cement kiln, top grade(electronic)glasses, ceramics and glass fiber.

(11) Production of ceramic carrier, AlN ceramic base piece, multiple-hole ceramics use in car catalyzing equipment.

(12) Production of inorganic, non-metal materials and products: artificial crystal, carbon/carbon complex materials, special kind of ceramics, special kind of airproof materials, quick oil sealed materials, special kinds of cementation materials, special type latex materials, water rubber materials, heat-transfer coefficient is or less than 0.025W/mK under normal temperature heat insulation materials and so on.

(13) Production of high tech compound materials: sequential fiber increasing thermoplasticity compound materials and prepreg, endure heat > 300°C colophony compound material

moulding craftwork assistant materials, colophony compound material oar, colophony compound material top grade sports articles, special capability glass steel tube (pressure > 1.2MPa), special function compound materials and products, deep water and diving compound material products, medical and healing use compound material products, carbon/carbon compound materials and brake piece, high capability ceramic compound materials and products, metal compound materials and products, metal layer compound materials and products, pressure  $\geq 320$ MPa super-high-pressure compound rubber pipes, air bus aviation tyres.

(14) Production of precise high capability ceramics and functional ceramic materials: carborundum super-minute powder (purity > 99%, average granule diameter < 1 $\mu$ m), Si<sub>3</sub>N<sub>4</sub> super-minute powder (purity > 99%, average granule diameter < 1 $\mu$ m), high pure and super-minute alumina powder (purity > 99%, average granule diameter < 0.5 $\mu$ m), low temperature sintered zirconia powder (sintered temperature < 1350 °C), high pure AlN powder (purity > 99%, average granule diameter < 1 $\mu$ m), rutile TiO<sub>2</sub> powder (purity > 98.5%), white char black (average granule diameter < 100nm=, barium titanate (purity > 99%, average granule diameter < 1 $\mu$ m=.

(15) Production of diamond film tools, thickness is 0.3mm or less super-thin artificial diamond saw piece.

(16) Deep processing of non-metal mineral products (super-thin comminution, high level pure, fine production, modification)

(17) Production of super high power black lead electrode.

(18) Production of pearlite mica (granule diameter: 3-150 $\mu$ m).

(19) Production of multiple dimension and multiple direction integer weaving fabric and profile modeling fabric.

(20) Use new dry cement kiln to innocuously dispose combusting industry castoff and life garbage.

#### 15. Non-Ferrous Metallurgical Smelting and Rolling Processing Industry

(1) Production of diameter > 200mm silicon single crystal and polishing piece, multiple crystal silicon.

(2) Production of high tech non-ferrous metallurgical materials: new type high capability hydrogen storing materials, lithium hydronium battery electrode materials, compound semiconductor materials (gallium arsenide, gallium phosphide, gallium Reexplanation, gallium nitride), high temperature superconduct materials, memory alloy materials (titanium nickel,

copper and iron memory alloy materials) , super minute(nanometer) calcium carbide and super minute(nanometer) crystal hard ally, superhard compound materials, noble metal compound materials, aluminum foil used for radiator, middle and high pressure cathode capacitance aluminum foil, special kind of large aluminum alloy materials, aluminum alloy precise model forge product, electrization railway built on stilts leads, super-thin copper strip, erosion proof heat exchanger copper alloy material, high capability copper nickel, copper and iron alloy strip, beryllium copper strip, thread, tube and stick process material, high temperature bearable tungsten filament, magnesium alloy cast, non-lead solder, magnesium alloy and its applicable products, bubble aluminum, titanium alloy strip materials and titanium jointing pipes, atomic energy grade sponge zirconium, tungsten and molybdenum deep machining products.

#### 16. Metal products industry

(1) Production of lightened car, automobile and environment protecting new materials (bodywork aluminum board, aluminum magnesium alloy materials, automobile aluminum alloy frame and so on).

(2) Development and production of high-grade hardware for construction, hot-water heating equipment and hardware parts.

(3) Production and processing (including painting and processing inner and outer surface of the products) of metal packing products (thickness < 0.3mm) used to pack all kinds of grain, oil and food, fruits, vegetables, beverages, daily using materials and such contents.

#### 17. General Machine-building Industry

(1) Manufacturing of numerically controlled machine tools of high level and key spare parts: numerically controlled machine tools which exceed quintuple linkage, digital control coordinate spindle processing centre , digital control system which exceeds quintuple linkage and servomechanism installations, high-speed and super-strong knives for exact digital control manufacturing.

(2) Manufacturing of multi-station forging forming machine of 1000 tons or more

(3) Manufacturing of equipments for braking up and smashing retired cars

(4) Manufacturing of soft FTL product line

(5) Manufacturing of vertical articulated industrial robots, welding robots and welding equipments thereof

(6) Manufacturing of special processing machines: complete sets of laser cutting and welding

equipments, exact processing laser equipments, digital-control and low-speed wire-cuts, submicron cracker

(7) Manufacturing of wheel or crawler crane of 300 tons or more (limited to equity joint ventures or contractual joint ventures)

(8) Design and manufacturing of high pressure plunger pumps of pressure(35-42MPa) and engine, design and manufacturing of low-speed big torque engine of pressure(35-42MPa)

(9) Manufacturing of electro-hydraulic proportion servo elements

(10) Design and manufacturing of integrated multi-path valves of pressure(21-31.5MPa) , pneumatic solenoid valves of less than 0.35W high-frequency electrical control valves of more than 200Hz

(11) Design and manufacturing of hydrostatic drive device

(12) Development and manufacturing of non-contacting gas film seal of pressure more than 10MPa, dry gas seal of pressure more than 10MPa (including experience device)

(13) Development and manufacturing of macromolecule material device for automobiles(rub piece, changed phenol aldehyde plunger, non-metal liquid pressure mother pump and so on)

(14) Manufacturing of car boss axletree of 3 and 4 generation(function elements of boss axletree of flange and transducer inside or outside of the axletree, digital control machine tool or processing centre axletree of high or mid class (the processing center should have more than three axis interlocking function and 3-4 $\mu$ m repeated precision) , high-speed wire or board rolling mill axletree(assistant axletree and roller axletree of single-wire rolling mill of more than 120m/s and of thin-board rolling mill of more than 2mm) , high-speed railway axletree(with speed of more than 200km/h) , low-noise axletree of vibration of less than Z4 (Z4, Z4P, V4, V4P), level P4, P2 axletree of various axletree

(15) Production of high temperature resistant and insulation material (with F, H insulation class), as well as insulation shaped parts

(16) Development and manufacturing of fluid pressure rubber sealing

(17) Manufacturing of high binding spares of 12.9 level or more

(18) Manufacturing of casting and forging workblanks for cars and motorcycles

(19) Remanufacturing of machine tools, spare parts of cars (except five matured varieties)and

project machines.

#### 18. Special Equipment Manufacturing

(1) Manufacturing of mine trolley mining, loading and transporting device: mechanical drive tipper for mine of 100 tons or more, mobile crusher, wheeled digger of 3000m<sup>3</sup>/h or more, loading machine for mine of 5 m<sup>3</sup> or more, electric driving mining machine of 2000 kw or more and so on

(2) Manufacturing of geophysical, logging equipment: MEME geophone, digital telemetry seismograph, digital imaging, computerized logging system, horizontal wells, directional wells, drilling rig equipment and apparatus, MWD logging while drilling

(3) Manufacturing of oil exploration, drilling, gathering and transportation equipment: floating drilling systems and floating production systems which will work in more than 500 meters of water depth, working depth greater than 600 meters undersea oil production, gathering and transportation equipment, power of winch greater than 3,000 kilowatts, top driving force greater than 850 kilowatts, drilling pump more than 1,800 kilowatts of power by deep-sea oil rig, drilling depth of 9,000 meters above the desert land drilling rig and oil rig, 10 million tons / year oil refining installations with 80 tons and above Pistons edge reciprocating compressor, NC oil Sham Tseng logging, oil Drilling Mud Hole solid operating highway tunnel monitoring equipment, ventilation, disaster prevention and relief system equipment manufacturers

(4) Design and manufacturing of skeleton shield integrated system with diam of 6 meters, TBM system integrating with diam of 5 meters; manufacturing of large digging drilling of caliber of 1 meter and depth of 30 meters, design and manufacturing of push bench with diam of 1.2 meters or more, manufacturing of large complete non-digging pipeline laying device with pulling power of 200 tons or more, manufacturing of consecutive wall underwater drilling machine, manufacturing of automatic vertical drilling system

(5) Design and manufacturing of large lifting machine of 100 tons or more 320hp

(6) Design and manufacturing of pedrail soil shifter of ground pressure of 0.03MPa or less, power of 220 hp or more, large soil shifter of 520 hp or more

(7) Design and manufacturing of purge machine of 100 m<sup>3</sup>/h or more, digging device in digging vessel of 5000 tons or more

(8) Design and manufacturing of tuffcrete diosmosing-proof wall for flood control bar

(9) Manufacturing of machine for underwater mass: soil shifter, loader and digger 9 miles

under water

(10) Manufacturing of devices of road bridge maintaining and automatic testing

(11) Manufacturing of devices of road tunnel supervision, winding, disaster control and rescuing system

(12) Design and manufacturing of the large-scale railway construction, and operation of large-scale road maintenance machinery and safety equipment

(13) Manufacturing of (asphalt) shingles equipment, galvanized steel and other metal roof production equipment

(14) Manufacturing of spot spraying polyurethane waterproof thermal insulation system equipment which could protect environment and conserve energy, technology and equipment of polyurethane sealant paste preparation, technology and production equipment of modified silicone sealing paste preparation

(15) Design and manufacturing of thin-slab continuous casting machine, high-precision strip mill (with thickness of precise 10 microns)

(16) Manufacturing of devices of direct reverting iron and liquation reverting iron

(17) Manufacturing of high power DC electric arc furnace of 50 tons or more

(18) Manufacturing of colorful panting or plating board devices

(19) Manufacturing of selecting device for multi-element, fine-powder and hard-selecting mine

(20) Manufacturing of key devices of 800000 tons/year or more of oxene complete devices: air compressor of pyrolysis gas, oxene and elemicin, complicated powder making machine of 1000000 tons/year, centrifuge with diam of 800 millimeter, unattackable pump and valve that can work under conditions of temperature 250 °C and pressure 15Mpa, valve that can work under conditions of temperature -55 °C or less and so on (limited to equity joint ventures or contractual joint ventures)

(21) Manufacturing of large complete devices of chemical processing of coal (limited to equity joint ventures or contractual joint ventures)

(22) Design, manufacturing and maintaining of metal product moulds (such as extrusion moulds of pipe, stick and shape of copper, aluminum, titanium and zirconium)

(23) Design and maintaining of punching mould of cover elements of automobile outside, clamp and test tools of automobile and motorcycle

(24) Design and maintaining of punching mould with precision of more than 0.02 millimeter (including 0.02 millimeter), precise mould with precision of more than 0.05 millimeter (including 0.05 millimeter) and mould standard elements.

(25) Design and manufacturing of nonmetal product moulds

(26) Manufacturing of beer filling device of 60000 bottles /h or more, drink mid or high hot filling device of 5 bottles /h, asepticism filling device of 36000 bottles /h or more

(27) Manufacturing of producing technologies and key equipments for aminophenol, zymi, food addiitive and so on

(28) Manufacturing of complete feed processing equipment of 10tons/h or more and key parts thereof

(29) Manufacturing of light board and box device of 0.75-millimeter high or less

(30) Manufacturing of single in folio colorful lithographic printing machine with speed of more than 16000 pages in folio /h(720×1020 millimeters), diprosopia in folio colorful lithographic printing machine with speed of 13000 pages in folio /h(720×1020 millimeters) , colorful lithographic in folio printing machine with speed of 13000 pages in folio /h(1000×1400 millimeters)

(31) Manufacturing of single roll lithographic printing machine with speed of more than 75000 pages in folio /h(787×880 millimeters) , diprosopia single roll lithographic printing machine with speed of more than 170000 pages in folio /h(787×880 millimeters) ,

(32) Manufacturing of colorful soft printing machine with speed of 300meters/m or more and coverage of 1000 millimeters or more

(33) Manufacturing of computer mass color pre-coordination systems, mass color remote handling systems, mass speed following systems, prints quality automatic testing and following systems, no-axis turning technologies, high-speed automatic splicer, paper giving machine and high-speed and automatic remote handling paper folding machine, automatic overprinting system, cooling device, silanion putting system, bias-adjusting device and so on.

(34) Deep processing technique and equipment manufacturing of plate glass

(35) Special high-tech Industrial sewing machines manufacturing

(36) Manufacturing of complete set of new type of paper (including pulp) making machines

(37) Manufacturing of equipment with new technique for post ornament and processing of leather

(38) Development and Manufacturing of new agriculture processing and storage equipment: new equipment for the processing, storage, preservation, classifying, packing, and drying of food, oil, vegetables, dried fruits and fresh fruits, flowers, meat and aqua-products; agricultural product quality testing equipment ; the quality detection equipment of agricultural products' damage; Rheometer; Farinograph; ultrafine pulverization equipment; Highly efficient dewatering equipment ; 5-grade plus high efficient fruit juice condensation equipment; equipment for Disinfection of powder food in Media; Aseptic packaging equipment for Semi-solid and solid food; Packaging Materials for Aseptic packaging, DVS Bacteria Starter for Dairy Production, Disc-type Separation centrifuges

(39) Manufacturing of Agricultural machinery: facility agriculture equipment(greenhouse Automatic irrigation equipment, Autocontrol configuration and fertilization Equipment of Nutritious Liquid, Efficient vegetable nursery equipment, Soil nutrient analysis instruments ), Tractor and associated farm tools with 120 kilowatts and above Matching engine power, Low fuel consumption, low noise and low-emission diesel engine, Spray Machines with Residual fog tablets Recovery Unit matching of large tractor, High-performance rice transplanter, Cotton harvesting machine, Adapted to a variety of row-spacing Self-moving Maize Reaping Machine(Hydraulic drive or mechanical drive)

(40) Manufacturing of new technical forestry equipment

(41) Manufacturing of equipment for reusing in fields and comprehensive utilization of straws and stalks of crop, Manufacturing of equipment for comprehensive utilization of Rice Husk

(42) Manufacturing of equipment for comprehensive utilization of waste agriculture products and waste fowl and livestock products which are bred in scale

(43) Manufacturing of festival fertilizer, pesticide section, water-saving technical Agriculture equipment

(44) Manufacturing of cleaning equipment for electromechanical wells and equipments for Laundering drug production

(45) Manufacturing of electronic endoscopes

(46) Manufacturing of Fundus Cameras

- (47) Manufacturing of Medical imaging equipments' Key components(high magnetic field intensity and superconduct MRI, CT, X-ray computed tomography, type-B ultrasonic )
- (48) Manufacturing of Medical Ultrasonic Transducer(3D)
- (49) Manufacturing of boron neutron capture therapy equipments
- (50) Manufacturing of X-ray Stereotactic Radiotherapy System
- (51) Manufacturing of Hemodialysis, Blood Filter
- (52) Manufacturing of equipment for auto elisa immuno system (including the functions of application of sample, elisa photo meter, wash plate, incubation, data, post treatment, etc.)
- (53) New techniques of quality control of medicine products and new equipment manufacturing
- (54) New analytical techniques and extraction technologies, and equipment development and manufacturing for the effective parts of traditional Chinese medicines
- (55) Producing and manufacturing of new packing materials, new containers for medicine, and advanced medicine producing equipment
- (56) Development and Manufacturing of equipment of new type of knitting machines, Key parts and Textile testing, laboratory equipment
- (57) Manufacturing of Computer Jacquard artificial fur machine
- (58) Manufacturing of Special Equipments for solar cell production
- (59) Development and Manufacturing of Pollution control equipments
- (60) Manufacturing of City Waste disposal equipments and equipments for Comprehensive Utilization of Rural organic waste
- (61) Manufacturing of Waste plastics, electronics, rubber, battery Recycling Equipments
- (62) Technology of hydrophily ecological system for protecting environment and equipment manufacturing
- (63) Development and Manufacturing of 100,000 cubic meters and above Daily production

seawater desalination and recycling cooling technology and complete sets of equipments

(64) Manufacturing of special Meteorological observation and analysis equipments

(65) Development of Seismic station, Seismic Network, and Mobile seismological observation technology System, and Manufacturing of equipments

(66) Manufacturing of three-drum radial tire building machines

(67) Manufacturing of Rolling resistance testing machine and Tire noise lab

(68) Manufacturing of new Heating measurement and Temperature Control Device Technical equipments

(69) Manufacturing of preparation, storage and transportation equipment and inspection systems of hydrogen energy

(70) Manufacturing of new Heavy residue gasification Atomization Nozzle, Steam leakage rate of 0.5 percent and below efficient Steam Traps, 1000 °C and above high-temperature ceramic heat exchanger manufacturer

(71) Manufacturing of Comprehensive Utilization of waste tire equipments

#### 19. Communication and Transportation Equipment Industries

(1) Manufacturing of complete automobiles (foreign investments shall not exceed 50%)and construction of automobiles research and development organization

(2) Manufacturing of automobile engine, reused manufacture of engines and construction of engine research and development organization: gasoline motor with output per litre not lower than 50 kw, diesel motor with output per litre not lower than 40 kw and discharge capacity below 3 liters, diesel motor with output per litre not lower than 30 kw and discharge capacity above 3 liters, motor driven by such new resources as fuel cells and compound fuel

(3) Manufacturing of key spare parts for automobiles as well as research and development of key technologies: complete disc brakes, complete driving rods, automatic gearboxes, fuel pumps of diesel engine, inhalant supercharger of engines, adhesive axial organ(used for four-wheel drive), hydraulic tappet, electronic cluster gauge, crankshaft and connecting bar(diesel motor above 8 liters), Anti—Lock Brake System(ABS, ECU, valve body, sensor) , ESP, BBW, electronic braking distribution system(EBD) , driving control system, gas generator for automobile airbags, electronic fuel injection system, sprays technology on fuel common rail technology(utmost spray pressure above 1600 pa) , VGT, VNT, discharge control equipment of motor meeting the

pollutant discharge standard of the fourth phase of China, ITM and coupler assembly, Steer-by-Wire System, Diesel Particulate Filter(DPF), intelligent cylinder, special rubber automobile components

(4) Production as well as research and development of automobile electronic devices: engine and underchassis control system as well as key spare parts, in-vehicle electronic technology (automobile information system and navigation system), automobile electronic network technology (limited to equity joint ventures), components for the input (sensor and sampling system) and the output(actuator) of electronic control system, EPS electronic controller(limited to equity joint ventures) , embedded electronic integration system(limited to equity joint ventures or contractual joint ventures) , electronic-controlled air suspension, ECS, electronic valve system equipment , electronic throttle, power cell(NiH and Li-con) and control system(limited to equity joint ventures) , integrated motor and control system(limited to equity joint ventures) , wheelboss motor, multifunction controller(limited to equity joint ventures) , fuel cell and spare parts thereof, hydrogen storing systems for automobiles, testing system for experiment and maintaining of automobile and motorcycle models

(5) Manufacturing of key parts for motorcycle: technology of electrical control fuel injection for motorcycle(limited to equity joint ventures or contractual joint ventures) , engine discharging device which satisfy motorcycle discharging criteria stage III of China

(6) Equipment for railway transportation(limited to equity joint ventures or contractual joint ventures) : research and development, design as well as manufacturing of complete train and key spare parts (drive system, control system, brake system) of rapid transit railway, railway of passenger special line, intercity railway, trunk railway and equipment for urban railway transportation; research and development, design as well as manufacturing of passenger service facilities and equipment for rapid transit railway, railway of passenger special line, intercity railway and urban railway transportation, design as well as research and development of related information system in the process of construction of information age; research and development, design as well as manufacturing of railway and bridge facilities and equipments for rapid transit railway, railway of passenger special line, intercity railway, manufacturing of equipment and fixtures for electrical railway, research and development of technologies for controlling railway noise and vibrating, manufacturing of discharging equipment for trains, manufacturing of safety monitoring equipment for railway transportation

(7) Design, manufacturing and maintaining of civil plane: those of trunk and branch lines (Chinese part shall hold the majority of shares) , general ones(limited to equity joint ventures or contractual joint ventures)

(8) Production and maintaining of spares parts for civil planes

(9) Design and manufacturing of civil helicopters: those of three tons or more (Chinese part

shall hold the majority of shares), those of less than three tons (limited to equity joint ventures or contractual joint ventures)

(10) Production of spare parts for civil helicopters

(11) Manufacturing of ground and water effect plane (Chinese part shall hold the majority of shares)

(12) Design and manufacturing of no-people plane and aerostat (Chinese part shall hold the majority of shares)

(13) Design, manufacturing and maintaining of plan engines and spare parts as well as air assistant power systems (limited to equity joint ventures or contractual joint ventures)

(14) Design and manufacturing of civil air-borne equipment (limited to equity joint ventures or contractual joint ventures)

(15) Design and manufacturing of civil rocket launcher (Chinese part shall hold the majority of shares)

(16) Manufacturing of flight ground equipments: civil airfield facilities, support equipment for civil airfield work, ground equipment for flight test, equipment for flight simulation and practice, equipment for aeronautic testing and measuring, equipment for aeronautic ground testing, comprehensive testing equipment for machines, special equipment for aeronautic manufacturing, equipment for pilot manufacturing aeronautic materials, ground receiving and applying equipment for civil aircraft, ground testing equipment for rocket launcher, equipment for dynamic and environmental experience for rocket launcher

(17) Manufacturing of mechanical and electrical products for aircrafts, temperature control products for aircrafts, test equipment for planet products and structure and organization products for aircrafts

(18) Manufacturing of light gas-turbine engine

(19) Design of vessels and equipment for ocean project of high and new technologies (limited to equity joint ventures or contractual joint ventures)

(20) Maintaining, design and manufacturing of vessels (including stages) and equipment for ocean project (Chinese part shall hold the majority of shares)

(21) Design and manufacturing of diesel engine for vessel of low, mid and high speed (limited to equity joint ventures or contractual joint ventures)

(22) Design and manufacturing of spare parts for diesel engine for vessel (limited to equity joint ventures or contractual joint ventures)

(23) Design and manufacturing of crankshafts of low and mid speed for diesel engine for vessel (Chinese part shall hold the majority of shares)

(24) Design and manufacturing of stateroom machine and deck machine for vessels (Chinese part shall hold the relative majority of shares)

(25) Design and manufacturing of communication and directing systems for vessels: communication systems, electronic directing equipment, vessel radar, electric compass automatic pilot, public broadcasting systems inside vessels and so on

(26) Design and manufacturing of overseas fishing vessels and cabin cruiser (limited to equity joint ventures or contractual joint ventures)

## 20. Electric Machinery and Equipment Industries

(1) Manufacture of the pivotal equipment of super-critical units of over 600,000 KW, and over 1,000, 000KW of fire and electricity station (limited to equity joint ventures and cooperative joint ventures): boiler-feedwater pump, circular water pump, valve of main steam loop high temperature and pressure which is over 400°C work temperature and 20Mpa of work pressure

(2) Manufacture of the equipment of over million kilowatt Nuclear-power plant (limited to equity joint ventures and cooperative joint ventures) Pump and valve of Nucleus, Nucleus II

(3) Manufacture of the technic and equipment of Fire- electricity plant to decoke and saltpeter, hop-pocket dust catcher

(4) Design and manufacture of the equipment of nucleus-electricity and fire-electricity airproof

(5) Manufacture of the equipment of nuclear-power of great model casting-forging

(6) Power transmitting and transforming equipment (limited to equity joint ventures and cooperative joint ventures): non-brilliant form transformer, high voltage implement great bushing, high voltage on-off operation implement, and freedom integer arc contact, direct current transmit electricity dried reactor, 6 inch direct current convertor clique high-power grain-valve tube, electrical apparatus contact material, and non-Pb, non-Cd solder accorded with EU command of RoHS

(7) Manufacture of the equipment of New energy electricity-power (limited to equity joint

ventures and cooperative joint ventures): photovoltaic power , geothermal power generation, tidal power generation, wave power generation, rubbish power generation, methane power generation, wind power generation over 1.5M

(8) Manufacture of stirling generating set

(9) Empolder and manufacture of straight line and plane motor and drive system

(10) Manufacture of solar air conditioning, heating system, solar dryer

(11) Manufacture of biomass drying pyrolysis system, biomass, gasification unit

(12) Manufacture of ac-fm voltage regulation drawbar

(13) Manufacture of intelligent moulded case circuit, ( 3800V, 1000A), large project intelligent cabinet or drawer type circuit breaker, belt- type intelligent electronic control distribution device

21. Communication equipment, computer and other electronic equipment manufacturing

(1) Digital video camera, digital sound-playing equipment and player equipment manufacturing

(2) Manufacture of flat panel display such as TFT-LCD, PDP, OLED, FED(including SED) and the material of flat panel display

(3) Manufacture of such parts as optical engine, light source, projection screen, high-resolution projection tube and LCOS module used in large screen color projection display

(4) Manufacture of digital audio and visual coding or decoding equipment, digital broadcasting TV studio equipment, digital cable TV system equipment, digital audio broadcast transmission equipment, digital television converter, digital television broadcasting Single Frequency Network(SFN), satellite digital TV up-linking station, front-end equipment manufacturing of SMATV

(5) Manufacture of high-performance single-lens reflex with more than 6 million pixels

(6) Design of integrate circuit, and manufacture of large digital integrate circuit with its wire width less than 0.18 micron, manufacture of simulated and digital analogy integrate circuit less than 0.8 micron and the encapsulation and test of such advanced equipment as BGA, PGA, CSP, MCM

(7) Large and medium-sized computer, high-performance computer with its operation more than 100 trillion times, portable micro computer, high-rank server with its operation more than 1 trillion times per second, large scale simulated system, large industrial controller and the manufacture of controller

(8) Manufacture of computer digital signal process system and board card

(9) Manufacture of figure and image recognition process system

(10) Development and manufacture of large-capability optical and disk driver

(11) Manufacture of high-speed storage system and intelligent storage equipment with its capability more than 100 TB

(12) Manufacture of large-breath( more than 900mm) high-definition colored printing equipment, high-definition colored printer head with its precision more than 2400dbi, and large-breath( more than 900mm) high-definition colored Xerox equipment

(13) Manufacture of Computer Assistance Design(three-dimensional CAD) , Computer Assisted Testing (CAT) , Computer Aided Manufacture(CAM) , Computer Aided Engineering(CAE) and other computer application system

(14) Development and manufacture of software product

(15) Development and manufacture of specialized electronic material( excluding the development and manufacture of optical fibre perform rod )

(16) Manufacture of specialized equipment, testing equipment, tools and moulds

(17) Manufacture of new type electronic components and parts: slice components, sensitive components and sensors, frequency monitoring and selecting components, mix integrated circuit, electrical and electronic components, photoelectric components, new type components for machinery and electronics, high-density interlinked build-up board, multilayer flexible board, flexible printing circuit board and packaging substrate

(18) High-tech green battery manufacture: dynamic zinc and nickel storage cell, zinc and silver storage cell, lithium-ion batteries, high-capability, air-proof and repair-free lead-acid battery, solar battery, fuel battery, column-shaped zinc-air battery and etc.

(19) High-brightness LBD with its luminous efficiency more than 50lm/W, epitaxial slice LBD(blue) with its luminous efficiency more than 50lm/W, white luminous tube with luminous efficiency more than 50lm/W and its power more than 200mW

- (20) Development and manufacture of RFID chip
- (21) Development and manufacture of key components and parts used in high-precision digital CD drive
- (22) Reproduction of read-only compact disk and manufacture of recordable compact disk
- (23) Design and manufacture of civil satellites {Chinese partner shall hold the majority of shares}
- (24) Manufacture of civil satellites effective payload (Chinese partner shall hold the majority of shares)
- (25) Manufacture of spare pans for civil satellites
- (26) Manufacture of telecommunication system equipment for satellites
- (27) Manufacture of receiving equipment of satellite navigation and key components
- (28) manufacture of optical communication measurement and instrument and light transceiver with its speed more than 10Gb/s
- (29) Ultra Broad Band (UWB) communication equipment manufacture
- (30) Manufacture of wireless Local Area Network(Wide Area Network)
- (31) Manufacture of Optical Cross Connect(OXC), Automatic Switch Optical Network(ASON) , optical fiber communication and transmission equipment more than 40G/sSDH and Coarse Wave Division Multiplexing(CWDM)
- (32) Manufacture of Asynchronous Transfer Mode(ATM) and IP digital communication system
- (33) Development and manufacture of third-generation and the following mobile communication system mobile phone, base station, core network equipment and network testing equipment
- (34) Development and manufacture of high-end router, network switcher more than 1 kilomega
- (35) Manufacture of air traffic control system equipment(limited to joint venture and cooperation)

## 22. Machinery Industries for Instrument and Meter, Culture and Office

(1) Manufacture of field-bus control system and its key components and parts

(2) Development and manufacture of large-scale sophisticated instruments: including electron microscope, laser scanning microscope, scanning tunneling microscope, laser with its power more than 2kw, industrial chromatograph, GC/MS, nuclear magnetic resonance spectrometer, energy dispersive analysis system, X-ray fluorescence spectrometer, diffraction analysis system, industrial CT, large-scale balance measuring machine, automatic testing system of on-line mechanical quality, ultra-speed centrifuge with its rotating speed more than 100000r/min, large-scale metallurgical microscope, three coordinate measuring machine, laser comparator, electrical prospecting instrument, airborne electrical prospecting and gamma-ray spectrometry measuring instrument more than 500 m, borehole gravimetry and 3-dimensional magnetograph, high-precision microgal and aviation gravity gradiometer, High-performance welding rare earth material with permanent magnetism, portable geological radar

(3) Manufacture of high-precision digital voltmeter, current meter (with measuring range of seven bit and a half and above)

(4) Wattless Power manufacture of automatic compensation equipment

(5) Manufacture of two-phase flowmeter and solid flowmeter

(6) Manufacture of automatic plating machine for electron gun

(7) Manufacture of industrial NDT X-ray equipment governing the volt more than 800 kv

(8) Manufacture of new technical equipment for safety production and environmental protection

(9) VXI bus automatic test system (in accordance with IEEE1155 international standards)

(10) Development and manufacture comprehensive management system for under-mine monitoring and disaster-forecasting apparatus and coal safety measurement

(11) Manufacture of the equipment for engineering measurement and global geographical observation equipment: digital triangle surveying system, Digital programmed system for three-dimensional topography model (acreage > 1000 × 1000 mm, horizontal error < 1 mm, altitude error < 0.5 mm), ultral wideband seismograph ( $\phi < 5$  cm, frequency band 0.01-50 Hz, equivalent quaking speed noise < 10-9 m/s), integrated earthquake data processing system, extensive under-well earthquake and auspice observation apparatus, sophisticated controllable epicenter

system, engineering velocity measuring system, high-precision GPS receiver (precision 1mm + 1ppmm), INSAR graphics receiving and processing system, absolute gravimeter with the precision less than 1 microgal, satellite gravimeter, Doppler weather radar adopting coherent technology or double polarization technology, visibility measuring apparatus, meteorological sensor, (including temperature, pressure, humidity, wind, precipitation, cloud, visibility, radiation, frozen earth, depth of snow), anti lightning stroke system, multilevel soot and dust sampler, three-dimension supersonic anemoscope, high-precision intelligent total station machine, three-dimensinal laser scanner, high performance diamond bit used for drilling, laser rangefinder without cooperative target, wind profiler(affixed with RASS), GPS electronic probe system, CO<sub>2</sub>/H<sub>2</sub>O general observation system, boundary layer laser doppler radar, granule chromatography, (3nm-20 $\mu$ m) , high-performance data collector, under-water glider

(12) Manufacture of new-tech equipment of environmental-protection testing instrument: air quality testing, water quality testing, new-tech equipment of fume on-line detecting instrument, apparatus for emergency treatment and complete-set new differential coefficient analysis system, automatic calibration, composite, low-drift, on-line remote measurement and remote controlled apparatus and system and etc.

(13) Manufacture of air-pollution prevention and control equipment: high-temperature-proof and erosion-proof filtering material, wet desulfurization complete-set equipment in coal-fueling factory, low-NOX fueling equipment, catalysts for denitrification of fuel gas and complete set of denitrification equipment, purified equipment for the polluted organic gas, purified equipment for gas expelled from diesel-driven automobile

(14) Manufacture of equipment for water-pollution prevention and control: horizontal screw centrifugal dehydrator, membrane and its material, ozonizer more than 10kg/h, NO<sub>2</sub> generator with more than 10kg/h, ultraviolet disinfection device, small domestic sewage treatment device in the rural area

(15) Manufacture of the equipment for treating solid refuse: earth- leak-proof membrane in refuse burying factory, the device for treating dangerous solid waster, methane-for-electricity equipment in refuse burying factory, the equipment for comprehensively using the domestic animal and fowl waste in large scale

(16) Manufacture of environment motoring apparatus: SO<sub>2</sub> automatic sampler and calcimeter, NO<sub>X</sub>, NO<sub>2</sub> automatic sampler and calcimeter, O<sub>3</sub> automatic monitor, CO automatic monitor, automatic sampler and calcimeter for soot and dust, automatic sampler and calcimeter for soot, portable calcimeter for harmful and toxic gas, automatic analyzer for organic pollutants in the air, COD automatic online monitor, BOD automatic online monitor, automatic online monitor for turbidity, DO automatic online monitor, TOC automatic online monitor, Automatic online monitor for ammonia nitrogen, radiation dose monitor, ray analyzer

(17) Manufacture of instrument and equipment for hydrological data collecting, processing, transmitting and flood warning

(18) Manufacture of ocean exploring apparatus and equipment: deep-sea underwater video camera and underwater camera, multi-beam explorer, shallow and deeper subbottom profiler, navigation warm-salt profiler, fluxgate compass, hydraulic wire line winch, underwater airproof electronic connector, energy recycle device used in filtration-proof seawater desalination with its efficiency more than 90%, high-pressure pump used in filtration-proof seawater desalination with its efficiency more than 85%, filtration-proof seawater desalination membrane( desalination rate more than 99.7%), low-temperature multifunction distilled seawater desalination equipment with its daily production more than 20, 000 tons, Marine ecosystem inspection buoy, section probing buoy, disposable measuring instrument of electrical conductivity, temperature and depth (XCTD), on-the-spot water quality measuring apparatus, intelligent chemical transducer for measuring the water quality of the ocean (continues work for 3-6 months), electromagnetic current meter sensor, navigating acoustic Doppler current profiler(self-contained, direct-read, used-in-ship), electricity conductivity rate deep-section profiler, acoustic responding emancipator(set deep into the ocean)

### 23. Other manufacturing industries

(1) Development and utilization of clean-coal technical product (coal gasification, coal liquefaction, water-coal, industrial lump-coal)

(2) Coal ore dressing by washing and comprehensive utilization of powered coal (including desulphurized plaster), coal gangue

(3) Production of the all biodegradable material

### IV. Production and Supply of Power, Gas and Water

1. Construction and operation of electricity power by employing the clean fuel technology of integral gasification combined circulation (IGCC), circulating fluidized bed more than 0.3 million kw, Pressurized Fluidized Bed Combustion Combined Cycle(PFBC) more than 0.1 million kw

2. Construction and operation of back pressure combined and heat power

3. Construction and management of hydropower stations with the main purpose of power generating

4. Construction and management of nuclear-power plants (Chinese partner shall hold the majority of shares)

5. Construction and management of new energy power plants (solar energy, wind energy, magnetic energy, geothermal energy, tide energy and biological mass energy, etc.)

6. Utilization of sea water (direct use of sea water, seawater desalination), using industrialization to recycle industrial sewage

7. Construction and operation of urban water-supply plant

#### V. Communication and Transportation, Storage, Post and Telecommunication Services

1. Construction and management of grid of national trunk railways (Chinese partner shall hold the majority of shares)

2. Construction and management of feeder railways, local railways and related bridges, tunnels and ferry facilities (limited to equity joint ventures or contractual joint ventures)

3. Comprehensive maintenance of infrastructure of high-speed railway, special railway line, intercity (Chinese partner shall hold the majority of shares)

4. Construction and management of highways, independent bridges and tunnels

5. Road freight transportation companies

6. Construction and management of public dock facilities of ports

7. Construction and management of civil airports (the Chinese party shall hold the relative majority of shares)

8. Air transportation companies (Chinese partner shall hold the majority of shares)

9. General aviation companies for agriculture, forest and fishery (limited to equity joint ventures or contractual joint ventures)

10. International liner and tramp maritime transportation business (the Chinese party shall hold the relative majority of shares)

11. International containers inter-modal transportation

12. Construction and management of oil (gas) pipelines, oil (gas) depots and petroleum wharf

13. Construction and management of the facilities of coal delivery pipelines

14. Construction and management of storage facilities relating to transportation services

VI. Wholesale and Retail Trade Industry

1. Wholesale, retail and logistic distribution of general goods

2. Modern logistics

VII. Rent and business service

1. Accounting and auditing (limited to equity joint ventures or contractual joint ventures)

2. Information consulting agencies of international economy, science and technology, environmental protection

3. Engaged in such information technology and business flow outsourcing services as system application management and maintenance, information technology supportive management, bank background service, financial settlement, human resource service, software development, call center, data processing by means of accepting service outsourcing

VIII. Scientific research, technology service and geological exploration

1. Biological engineering technique and bio-medical engineering technique

2. Isotope, irradiation and laser technique

3. Sea development and sea energy development technology, comprehensive technology of sea chemical resources, development of the relevant products and deep-processing technology, sea medicine and biochemical product development technology

4. Sea surveying technology( sea tidal wave, meteorology, environmental monitoring) sea bed probing, exploration and evaluation technology of ocean resource

5. Comprehensively use the high chemical additional value technology to distill chemical potassium, bromine, magnesium from dense sea water after desalination and its deep procession

6. Development of energy-saving technology

7. Technology for recycling and comprehensive utilization of resource, development and application of the recycling technology of the waste dispelled by enterprises

8. Technology for environment pollution treatment and monitoring

9. Energy-saving and consumption-reduction in chemical fiber production and the new technology to deal with polluted air, water and solid waste

10. Technology for preventing from desertification and desert improvement

11. Comprehensive management technology for balancing grass and domestic animal

12. Application technique of civil satellite

13. Research and development centers

14. Incubator for hi-tech, new products developing, and incubation of enterprises

#### IX. Water, environment and public facility management industry

1. Construction and management of key water control projects for comprehensive utilization (the Chinese party shall hold the relative majority of shares)

2. Construction and management of urban access-controlled roads

3. Construction and management of metro and city light rail (Chinese partner shall hold the majority of shares)

4. Construction and management of treatment plants for sewage, garbage, the dangerous wastes (incineration and landfill), and the facilities of environment pollution treatment

#### X. Education

1. Advanced educational institution (only limited to joint venture or cooperative)

#### XI. Public health, social security and social welfare

1. Service agencies for the elderly, the handicapped and children

#### XII. Culture, sports and entertainment

1. Operation of the performance site ((the Chinese party shall hold the relative majority of shares)

2. Operation of the gymnasium, body-fitting, competition performance, sports training and agency service.

## Catalogue of Restricted Foreign Investment Industries

### I. Farming, Forestry, Animal Husbandry and Fishery Industries

1. Breeding and seeds developing production of new train crop breed (Chinese party shall hold the majority of shares)
2. Processing of the logs of precious varieties of trees (limited to equity joint ventures or contractual joint ventures)
3. Cotton (raw cotton) processing

### II. Mining Industries

1. Exploring and mining of special and scarce coals exploration (Chinese partner shall hold the majority of shares)
2. Exploring and mining of barite (limited to equity joint ventures or contractual joint ventures)
3. Exploring and mining of precious metals (gold, silver, platinum families)
4. Exploring and mining of precious non-metals such as diamond
5. Exploring and cradling of phosphorite
6. Mining of szaibelyite and szaibelyite iron ores
7. Mining of Celestine
8. Mining of Ocean Manganese Nodule (Chinese partner shall hold the majority of shares)

### III. Manufacturing Industries

1. Farming Subsidiary Foodstuff Industry
  - (1) Processing of soybean, rapeseed edible oil (Chinese partner shall hold the majority of shares), deep-processing of corn
  - (2) Manufacturing of biology liquid fuel
2. Beverage Manufacturing Industries

(1) Processing of green tea and special tea with China's traditional crafts

(2) Carbonic acid beverage manufacturing

3. Tobacco Industries

(1) Manufacturing of threshing and curl tobacco leaf

4. Printing and Copy of Recording Vehicle

(1) Print of publication (Chinese partner shall hold the majority of shares, except packing and presentation)

5. Petroleum Processing and Coking Industries

(1) Construction and management of refineries which annual produce less than 800 ten thousand tons

6. Chemical Raw Material Products Manufacturing Industry

(1) Sodium hydroxide and potash production

(2) Production of sensitive materials

(3) Production of benzidine

(4) Production of chemical products from which narcotics are easily made (ephedrine, 3, 4-idene dihydro phenyl-2-acetone, phenylacetic acid, 1-phenyl-2-acetone, heliotropin, safrole, isosafrole, acetic oxide)

(5) Production of fluorine-chlorocarbon, hydrogen- fluorine-chlorocarbon, tetrafluoroethylene, fluorination-aluminum and hydrofluoric acid

(6) Production of polybutadiene, emulsion polymerization buna S, thermoplastics buna S

(7) Production of sulfate process titanium dioxide, open hearth process permanganate

(8) Production of baron, magnesium, iron ores

(9) Barium salt production

7. Medical and Pharmaceutical Products Industry

(1) Production of chloramphenicol, penicillin G, lincomycin, gentamicin, dihydrostreptomycin, amikacin, tetracycline hydrochloride, oxytetracycline, medemycin, kitasamycin, ilotylin, ciprofloxacin and ofloxacin

(2) Production of analgin, paracetamol, Vitamin B1, Vitamin B2, Vitamin C, Vitamin E

(3) Production of immunity vaccines, bacterins, antitoxins and anatoxin (BCG vaccine, poliomyelitis, DPT vaccine, measles vaccine, Type-B encephalitis, epidemic cerebrospinal meningitis vaccine) which included in the State's Plan

(4) Production of material medicines for addiction narcotic and A class psychoactive drug (Chinese partner shall hold the majority of shares)

(5) Production of blood products

(6) Production of non-self-destructible expendable injectors, transfusion systems, blood transfusion systems, blood bags

#### 8. Chemical Fibre Production Industry

(1) Production of chemical fibre drawnwork of conventional chipper

(2) Production of rayon staple viscose fibre

#### 9. Rubber Products

(1) Old tire recondition (not including radial tire), and production of industrial rubber fittings of low-performance

#### 10. Non-Ferrous Metal Smelting and Rolling Processing Industry

(1) Non-ferrous metal refining of tungsten, molybdenum, stannum (except tin compounds), antimony (including antimony oxide and antimony sulphide)

(2) Non-ferrous metal refining of electrolytic aluminium, copper, lead, zinc and another non-ferrous metal

(3) Smelting and separation of rare earth metal (limited to equity joint ventures or contractual joint ventures)

#### 11. Metal Manufacturing

(1) Manufacture of containers

12. Common Purpose Equipment Manufacturing Industry

(1) Manufacture of all kinds of general (p0) axletree and accessory (steel ball, cage), rough

(2) Manufacture of wheeled model, crawler crane less than 300 tons

13. Special Purpose Equipment Manufacturing Industry

(1) Production of low or middle class type-B ultrasonic displays

(2) Manufacture of equipment for producing long dacron thread and short fibre

(3) Manufacture of crawler dozers of less than 320 horsepower, hydraulic excavator less than 30 tons, wheel loader less than 6tons, grader of less than 220 horsepower, road roller, fork-lift truck, non-calzada dumper truck, road surface milling rework machinery, garden machine and tools, production of commodity concrete machinery (pump, agitating lorry, pump vehical)

14. Manufacturing of transport and communication facilities

(1) Repairing, design and manufacture of common ship (including subsection) (Chinese partner shall hold the majority of shares)

15. Manufacturing of Communication Apparatus, Computers and another Electric Installation

(1) Production of satellite television receivers and key parts

(2) Manufacture of fiscal cash register

#### IV. Production and Supply of Power, Gas and Water

1. Construction and management of conventional coal-fired power of condensing steam plants whose unit installed capacity is less than 300,000kW, within the small power grid in Xizang, Xinjiang, Hainan province, and the coal-fired power of condensing-extraction steam plants with dual use unit cogeneration

2. Construction and management of power network

#### V. Communication and Transportation, Storage, Post and Telecommunication Services

1. Railway freight transportation companies

2. Railway passenger transportation companies (Chinese partner shall hold the majority of shares)
3. Corporate of highway passenger transport
4. Corporate of enter-leave country fleet operation
5. Corporate of water transportation (Chinese partner shall hold the majority of shares)
6. General aviation companies engaging in photographing, prospecting and industry (Chinese partner shall hold the majority of shares)
7. Tele communication companies: telecommunication increment service (the foreign capital less than 50 percent), motion tone and data service in basic telecom, interior business and international business (the foreign capital less than 35 percent, 49 percent no later than 11th in December in 2007 is permitted )

#### VI. Wholesale and Retail Trade Industries

1. Commercial companies of commodity direct selling, mail order selling, Internet selling, franchising, commissioned operation, commercial management
2. Wholesale, retail and logistic distribution of grain, cotton, vegetable oil, sugar, medicines, tobaccos, automobiles, crude oil, capital goods for agricultural production (Chinese should hold the majority of shares of the multiple shops which have more than 30 branch stores and sale different kinds and brands of commodities from multi-suppliers)
3. Distributing and selling of audiovisual products (excluding movies) (joint venture or Chinese should hold the majority of shares)
4. Commodity auctions
5. Ship agent (Chinese should hold the majority of shares), tally for foreign vessels (limited to equity joint ventures or contractual joint ventures)
6. Wholesaling product oil and construction and operation of gasoline stations (Chinese should hold the majority of shares of the multiple shops which have more than 30 branch stores and sale different kinds and brands of commodities from multi-suppliers)

#### VII. Banking and Insurance Industries

1. Banks, financial leasing companies, finance companies, trust investment companies, currency brokerage companies
2. Insurance companies (the share of life-insurance companies is less than 50%)
3. Security companies (confined to A share consignment-in, B share, H share and government and company bonds consignment-in and transaction, the foreign-capital is less than one-third), security investment fund management companies (the foreign-capital is less than 49%)
4. Insurance brokerage companies
5. Futures companies (Chinese should hold the majority of shares)

#### VIII. Real Estate Industry

1. Development of pieces of land (limited to equity joint ventures or contractual joint ventures)
2. Construction and operation of high-ranking hotels, villas, high-class office buildings and international exhibition centers
3. Real estate transaction in second-grade market and medium and brokerage companies

#### IX. Leasing and Commercial Service Industry

1. Legal consulting
2. Market Research (limited to equity joint ventures or contractual joint ventures)
3. Status enquiry and grade service companies

#### X. Scientific Research and technical Services Industries, Geological Prospecting

1. Mapping companies (Chinese partner shall hold the majority of shares)
2. Inspection, verification and attestation companies for imported and exported goods
3. Photography service (including trick photography like airphotograph, except mapping aerial photography, limited to equity joint ventures)

#### XI. Irrigation, environment and public utilities management

1. Construction and management of fuel gas in big city, heating power and water supply and sewage net

XII. Education

1. Common high school education mechanism

XIII. Public Health, Sports and Social Welfare Industries

1. Medical treatment establishments (limited to equity joint ventures or contractual joint ventures)

XIV. Art, Sports and Entertainment Industries

1. Production and publication of broadcasting and TV programs and film-making (limited to contractual joint ventures)

2. Construction and operation of cinemas (Chinese partner shall hold the majority of shares)

3. Construction and operation of large theme park

4. Brokering agency of stage performances

XV. Other industries restricted by the State or international treaties that China has concluded or taken part in

## Catalogue of Prohibited Foreign Investment Industries

### I. Farming, Forestry, Animal Husbandry and Fishery Industries

1. Cultivation of China's rare precious breeds (including fine genes in plants industry, husbandry and aquatic products industry)
2. Production and development of genetically modified plants' seeds
3. Fishing in the sea area within the Government jurisdiction and in in-land water

### II. Mining and Quarrying Industries

1. Exploring and mining of tungsten, molybdenum, tin, antimony, fluorite
2. Exploring, mining and dressing of radioactive mineral products
3. Exploring, mining and dressing of rare earth metal

### III. Manufacturing Industry

#### 1. Beverage Industry

(1) Processing of green tea and special tea with China's traditional crafts (famous tea, dark tea, etc.)

#### 2. Medical and Pharmaceutical Products Industry

(1) Processing of traditional Chinese medicines that have been listed as the Regulations on Conservation and Management of Wild Chinese Medicinal Material Resources and Rare and Endangered Plants in China

(2) Application of preparing technique of traditional Chinese medicines in small pieces ready for decoction, like steam, frying, moxibustion, calcining, and production of the products of secret recipe of traditional Chinese patent medicines

#### 3. Non-Ferrous Metal Smelting and Rolling Processing Industry

(1) Smelting and processing of radioactive mineral products

#### 4. Special Equipment Manufacture Industry

(1) Manufacture of Weapons and Ammunition

5. Electric Machinery and Equipment Manufacture Industry

(1) Manufacture of open-lead-acid cells, mercury Button Type Silver Oxide Cells, paste dioxide-zinc battery and nickel cadmium cells

6. Industry Products and Other Manufacturing Industries

(1) Ivory carving

(2) Tiger-hone processing

(3) Production of bodiless lacquerware

(4) Production of enamel products

(5) Production of Xuan-paper (rice paper) and ingot-shaped tablets of Chinese ink

(6) Production of carcinogenic, teratogenic, mutagenesis and persistent organic pollutant products

#### IV. Production and Supply of Power, Gas and Water

1. Construction and management of conventional coal-fired power of condensing steam plants whose unit installed capacity is less than 300,000kW, within the small power grid in Xizang, Xinjiang, Hainan province, and the coal-fired power of condensing-extraction steam plants with dual use unit cogeneration

#### V. Communication and Transportation, Storage, Post and Telecommunication Services

1. Companies of air traffic control

2. Companies of postal services

#### VI. Leasing and Commercial Service Industry

1. Social investigation

#### VII. Scientific Research and technical Services Industries, Geological Prospecting

1. Development and application of human stem cells and gene diagnosis therapy technology

2. Geodetic survey, marine charting, mapping aerial photography, administrative region mapping, relief map of map compilation and navigation electronic map compilation of common map compilation

#### VIII. Irrigation, environment and public utilities management

1. Construction and management of nature reserve and international signify marshy
2. Development of resources about wild animals and plants be native to domestic protected by nation

#### IX. Education

1. Institution of compulsory education and special education, like military, policeman, politics and party school

#### X. Art, Sports and Entertainment Industries

1. News agencies
2. Business of publishing, producing, master issuing, and importing of books, newspaper and periodical
3. Business of publishing, producing, master issuing and importing of audio and visual products and electronic publications
4. Radio stations, TV stations, radio and TV transmission networks at various levels (transmission stations, relaying stations, radio and TV satellites, satellite up-linking stations, satellite receiving stations, microwave stations, monitoring stations, cable broadcasting and TV transmission networks)
5. Companies of publishing and playing of broadcast and TV programs
6. Companies of films making, issuing, business
7. News website, network audiovisual service, on line service location, internet art management
8. Video screening companies
9. Construction and management of golf course



10. Gambling industry (including gambling turf)

11. Eroticism

XI. Other Industries

1. Projects that endanger the safety and performance of military facilities

XII. Other industries restricted by the State or international treaties that China has concluded or taken part in