

Government Encouragement of Foreign Investment in China's Chemical Industry:

Which Chemical Products and Segments Are Affected?

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On July 31, 2020, the National Development and Reform Commission and the Ministry of Commerce published a draft of the "Catalogue of Industries Encouraging Foreign Investment (2020 Edition)" and asked for comments until Aug 30, 2020. The catalogue includes 34 categories related to the chemical industry. What are these categories, why are they included, and what does it mean for potential foreign investors?

The draft groups the 34 categories into 4 segments:

Petroleum processing, coking and nuclear fuel processing (1 category)

Chemical raw materials and products (23 categories)

Chemical fibers (5 categories)

Rubber and plastics (5 categories)

The first segment, "petroleum processing" etc., covers some methods of oil processing and

is of less interest to the downstream chemical industry.

The second segment, "chemical raw materials and products" is by far the biggest segment, accounting for two thirds of all chemical categories.

A strong focus within this segment is on innovative materials with properties superior to the existing ones. Examples include the categories



High-performance fluorine resins
High-performance coatings
New fertilizers
New forestry chemicals

New pesticides

New catalysts and other fine chemicals

Organic polymer materials (e.g., aircraft skin coatings, lithium ion battery separator, nanocoating materials, self-repairing surface treatment etc.)

This partly overlaps with materials with superior environmental properties and materials improving the environmental impact of chemical processes, as indicated by categories such as

Biological pesticides

Membranes for environmental protection

Low-volatility inks

High-solid coatings

Propylene oxide by hydrogen peroxide oxidation

Utilization and treatment of waste gas and liquid

Hydrogen fuel production

The catalogue also promotes the development of a stronger fine and specialty chemicals segment in China. Categories include

Production of natural and synthetic fragrances

Fine chemicals including paper chemicals, adhesives, sealants, oilfield additives

New catalysts

Another important thrust is to reduce China's dependency on imports of chemical materials, most of which are at the higher end of the value scale. Categories for which this applies include

Production of engineering plastics (e.g., PBT, PA, LC)

Production of high-purity electronic grade hydrofluoric acid and hydrogen fluoride

Production of high-end polyolefins (while China has increasing capacity for standard polyolefins, the country still imports many of the more sophisticated grades)

Specialty rubbers

Production of high-purity industrial gases including electronic gases

Production of fiber raw materials such as nylon 66 salt and 1,3-propanediol

The third segment, "chemical fibers", primarily contains categories that similarly focus on innovation, sustainability and high-performance materials. Examples include the production of high-performance fibers (e.g., carbon fiber, aramid, UHMWPE, PPS), the use of renewable resources to produce biomass fibers (e.g., Lyocell, PLA, PHA) and the production of new polyamides such as the different nylon varieties nylon 11, nylon 12, nylon 1414, high-temperature nylon. Innovative polyesters and their applications play a prominent role in this segment, e.g., production of new polyesters such as PTT and

PEN, production of functional polyesters (e.g., biodegradable, low-melting, non-crystalline, flame retardant, antibacterial).

The fourth segment, "rubber and plastics", is strongly focused on environmental aspects of these products. Relevant categories include the development of biodegradable plastics, the recycling of waste plastics, and environmentally friendly agricultural films. The innovation aspect is covered in a category promoting new technologies for flexible packaging.

How does the 2020 draft catalogue compare with the 2019 version? In fact, the differences are relatively small. Most categories have remained unchanged, none have been removed, and two have been added. These are "Production of Polyethylene Polyamine Products" in the chemical raw materials section and "Development, Production and Application of Silicone Products" in the rubber section. Polyethylene polyamines are primarily used as hardeners in epoxy resins but also in the production of ion exchange resins, as crude oil demulsifier, additive for drilling fluids, and as a raw material for corrosion inhibitors, amino resins, varnishes, disinfectants and detergents. Presumably this broad application spectrum merits their inclusion in the 2020 version of the catalogue. Similarly, silicone rubber is used in a large variety of applications such as automotive, cooking products, apparel,



sportswear, electronics and life science applications (including respiratory masks, which presumably due to Covid-19 feature much more prominently in people's thinking).

The limited number of changes in the catalogue is consistent with its representation of a long-term government strategy of shaping the chemical industry. Setting up capacities in each of the categories is a process that will take several years or even decades—any massive shifts from year to year would therefore be counterproductive. This also means that investors can expect the currently promoted industries to stay in favor at least in the medium term, if not longer.

In summary, China's catalogue of promoted areas for foreign chemical investment is in line with China's broader industrial policy of phasing out backwards, heavily polluting industries, and promoting investment in high-tech areas that move China up in the global value chain. In addition, self-sufficiency is regarded as a goal on its own. In the chemical

area, this results in four basic subjects for investment promotion:

Chemicals and production processes with improved environmental balance

Chemicals and materials with improved functional properties

Chemicals for which China currently strongly depends on imports

Chemicals which are associated with higher value creation (this of course partly overlaps with some of the other areas, but may also be a goal on its own, e.g., in fragrances)

What does the catalogue mean for foreign chemical investors in China? Investment in the areas listed in the catalogue is supported by a variety of incentives. These incentives include customs duty exemptions for imported self-use equipment and preferential land transfer fees (no lower than 70% of the corresponding lowest national standard price for industrial-used land). Local governments may also offer tax incentives and streamlined approval procedures. In addition, inclusion in the list of promoted

categories may be vital to secure space in a high-quality chemical park. For example, Shanghai's chemical industry park (SCIP) has become extremely selective in choosing new tenants but allowed Invista to build an adiponitrile plant in the park, likely because adiponitrile is among the chemicals listed in the catalogue (with a minimum production capacity of 50 kt, which is easily surpassed by Invista's capacity of 400 kt).

Foreign investors may therefore want to familiarize themselves with the catalogue and try to match it with their company strategy. Any China investment aligned with the policy outlined in the catalogue will certainly find a warm response by Chinese authorities. And while the catalogue is focused on greenfield investments in China, it may also have an impact on M&A activity. Foreign companies acquiring domestic players in the areas listed in the catalogue with the promise of upgrading the technology and portfolio of their targets will have a powerful argument in their favor.

