

USCBC Unofficial Summary of 12th FYP on Strategic Emerging Industries

On July 20, the State Council released the [12th Five-Year Plan for Strategic Emerging Industries \(FYP, 2011-2015\)](#), which outlines policy priorities and plans for each of China's seven strategic emerging industries (SEIs), including energy-efficiency and environmental conservation, next-generation information technology, biological products, high-end equipment manufacturing, new energy, new materials, and new-energy vehicles (NEVs). SEIs are an important part of China's 12th Five-Year Plan and the Chinese government's plan to transition the Chinese economy into a high value-added economy. [In a recent interview](#), the National Development and Reform Commission's (NDRC) Deputy Commissioner Zhang Xiaoqiang gave NDRC's official analysis of the plan, pointing out key issues for the implementation of the plan, and noting that foreign enterprise would be eligible to participate in SEI programs and policies as long as they are legally registered in China.

The US-China Business Council (USCBC) has summarized the main points of both Zhang Xiaoqiang's interview and the FYP below, including goals, specific projects, and supporting policies the Chinese government hopes to use to promote SEI development.

Key Points from Zhang Xiaoqiang's interview regarding NDRC's analysis of the plan:

- The energy efficiency & environmental conservation; next-generation information technology, biological products, and high-end equipment manufacturing industries will be developed as “pillar” industries, putting these industries in priority position for government support. The reason these industries have been given priority is because they hold a much higher percentage of overall SEI GDP than the three remaining SEIs—new energy, new materials, and new-energy vehicles.
- Different localities should develop SEIs based on their own provincial or municipal advantages. For example, wind power should be promoted in regions with strong wind resources, such as the northwest and north-central regions of China. Hubei Province's focus should be on photoelectron industries but no other new generation IT industries. The east coast and inland provinces have different advantages and should not all focus on new energy automobile and photovoltaic industries.
- Over the long term, China needs new energy, however due to several factors there is currently an overcapacity in the photovoltaic industry. There is a lot of uncertainty about the development of this industry, but China will continue to promote the entire industry, and prioritize good enterprises while eliminating poor ones.
- In addition to establishing special funds, which will in part be used to allocate subsidies to SEIs, and providing financial support, the central government will also release measures on tax-reform to encourage more investment in SEIs, including measures related to turnover tax, income tax, consumption tax, and business tax.
- Foreign enterprises should receive equal treatment, as long as companies are legally registered in China.
- More implementation details from different government agencies will come out soon.

Main Goals:

- R&D investment by key SEI enterprises should exceed 5 percent of the company's sales revenue.
- 20 percent annual growth rate for all seven SEIs combined.
- Added value of SEIs industries accounting for around 8 percent of GDP by 2015 and 15 percent of GDP by 2020.

20 Specific Projects:

- **Major Energy Saving Technology and Equipment Industrialization Project:** Form a group of core enterprises and industrialization demonstration bases, to promote the development of energy-saving technical equipment and products. Increase the market share of energy efficient technology and equipment by roughly 30 percent within the energy production industry from 2011 levels, while achieving equipment development and manufacturing capabilities close to advanced international levels.
- **Major Environmental Protection Technology and Equipment Industrialization Demonstration Project:** Cultivate a group of leading businesses and a group of "professional, precise, special and new" environmental protection enterprises. Create 10 to 15 environmental protection technology and equipment industrialization bases.
- **Project for Recycling of Important Resources:** Create a group of demonstration sites for the recycle and reuse of urban waste products; implement remanufacturing industrialization demonstration; set up a number of remanufacturing engineering (technology) research centers; practice industrial waste recycling; establish a group of demonstration cities with waste recycling system. By 2015, the recycled materials should reach 25 million tons per year and bulk solid waste should reach 400 million tons per year.
- **"Broadband China" Project:** Launch TD-LTE scale commercial demonstration. By 2015, 95 percent of the administrative villages should have access to broadband and 80 percent of cable TVs should have digital technology and on-demand functions.
- **High-performance Integrated Circuit Project:** By 2015, the value of the proportion of integrated circuit design production from the domestic market should be 15 percent, up from 5 percent in 2011.
- **New Panel Display Project for Television Sets:** By 2015, new types panel display technology, for example TFT-LCD or PDP high-efficiency TV sets, should account for at least 80 percent of new color TVs sold.
- **Internet of Things and Cloud Computing Project:** Launch the demonstration of the internet of things based on innovative products and solutions in fields typically associated with the internet of things; promote the development and innovation in cloud computing services through the integration of new technologies, setting up cloud computer service centers, and promoting business models that utilize cloud computing technologies.
- **Project to Utilize Information Technology to Benefit the People:** Develop electronic commerce demonstration; launch new information service for public service fields; support a number of cities to promote e-commerce development models while supporting

the implementation of new information technologies; integrate the internet of things and smart technologies to create digitally-run, energy-efficient households; expand coverage of information service in urban and rural areas and other fields; increase the use of information technology equipment in the management of domestic social problems

- **Biological Drugs and Vaccines Project:** Construct several research and development and industrialization technology platforms. By 2015, develop more than 30 new types of biomedical drugs to enter the market. Increase the innovation capability to manufacture genetically engineered drugs and vaccines.
- **High-Performance Medical Treatment Equipment Project:** Master a group of core technologies of high-performance medical imaging diagnosis and treatment equipment, in which domestic companies independently hold intellectual property rights
- **Biological Breeding Project:** Create and develop a number of key molecular breeding technologies and equipment; raise market share of main crops, livestock, and new varieties of poultry, in which domestic companies hold intellectual property rights independently.
- **Biological Based Material Project:** Strengthen the bio-based products application demonstration. By 2015, achieve a breakthrough in the development of a number of bio-based materials and industrialization technologies. Achieve large-scale production of bio-based materials that are competitive with petroleum-based materials, e.g. - plastics or textiles made from biological materials as opposed to traditional products made from petroleum.
- **Aviation Equipment Project:** Develop internationally competitive planes that have 150-seat capacity and C919 single channel lines; promote the ARJ21 regional airplane in large-scale production and in series development; conduct pilot program for developing commuter airlines.
- **Space Infrastructure Project:** Promote satellite system demonstration in the key industries and areas. Form core national space infrastructure with continuous and stable operations and systems which function optimally.
- **Advanced Rail Transit Equipment and Key Components Project:** Establish research and development programs, testing facilities, a standards system, and an intellectual property rights protection system for key modern rail transportation technology equipment, as well as key components and systems.
- **Marine Engineering Equipment project:** Set up new manufacturing platforms for equipment assembly; improve the standards system for design and construction.
- **Intelligent Manufacture Equipment Project:** Promote intelligent manufacture technologies and equipment demonstration in key fields. By 2015, the domestic market share of intelligent measurement and control devices and parts manufactured using domestic intellectual property rights should reach 30 percent.
- **Project for the Application and Integration of New Energy:** Promote the development of renewable energy power systems, through the construction of demonstration sites; carry out new energy technology comprehensive application demonstration. By 2015, build the world's leading new energy technology research and development and manufacturing bases.
- **Project to Upgrade Key Materials:** Explore new materials, such as light alloy materials,

rare earth metals material, and high-quality steel, improve industrialization of some new materials, such as medical used materials, advanced battery materials, new type semiconductor materials; utilize some materials including new green building materials, high performance composite materials, inorganic modified polymer materials, and metal alloy materials into various sectors, such as power, transportation, and construction. Improve the standards system for new materials, and build a new platform of material development, testing, application, information, and other public services.

- **New Energy Vehicle Project:** Set up product development and patent database; expand the scope and scale of pilot projects related to new-energy vehicle subsidies, which are passed on to private consumers.

Key Policy Supports:

- The government will set aside money to be used to create funds that will be used for certain subsidies and other financial support to promote SEIs.
- Encourage financial institutions to support strategic emerging industries, through enlarging available credit to companies operating in these industries
- Allow qualified enterprises to help finance SEIs through listing and issuing private bonds
- Set up SEI venture investment guide funds, which are venture capital funds that invest in the SEIs that are started with seed money from the central government.
- Encourage the introduction of private capital into SEI sectors, qualified foreign companies may also be encouraged to invest in SEIs.

Inter-Agency Coordination Group:

An inter-ministerial task force will be set up, which will be made up of officials from NDRC, the Ministry of Science and Technology (MOST), the Ministry of Industry and Information Technology (MIIT), the Ministry of Commerce (MOFCOM), and other relevant departments. The office of the task force, which will be charged with day-to-day operations for coordinating between ministries, will be set up within NDRC. NDRC will coordinate supervision and track implementation of the plan with other relevant departments.

For a chart detailing 24 specific SEI sectors, [click here](#)