China's Strategic Emerging Industries: Policy, Implementation, Challenges, & Recommendations

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Executive Summary

- China's central government has identified seven "strategic emerging industries" (SEIs) that officials hope will become the backbone of China's next phase of industrial modernization and technological development.
- Many of these policies are still being drafted or are in the early stages of implementation. Foreign companies have increasingly sought to understand how these policies may affect them and what market opportunities may exist within these sectors.
- Senior leaders have noted on several occasions that foreign-invested enterprises should enjoy equal treatment in regards to all SEI policies. However, past experience with central government industrial plans that have placed limits on foreign companies' opportunities to participate in key markets has led companies to be cautious about current opportunities.
- While central and local governments will both play important roles in developing SEI policies, provincial and municipal governments will be the primary drivers of SEI implementation nationwide and have significant authority to draft plans, funding schemes, preferred technology catalogues, and pilot projects.
- Local government transparency about local implementation strategies varies greatly by province or municipality. Most provinces appear to lack coordination with regard to implementing SEI development policies, and only limited government information is publicly available, making information gathering difficult.
- Local government financial subsidies will be a primary incentive for companies to develop new products and technologies in SEI sectors. Access to special funding in certain localities seems to favor domestic enterprises by requiring locally owned and registered intellectual property (IP).
- US-China Business Council (USCBC) members indicate that current SEI-related incentives and programs do not drive their strategy and investment decisions and are not vital to their business development. At the same time, USCBC members would like to see current and future SEI incentives and programs offered on a non-discriminatory basis, to ensure that foreign companies are not unfairly disadvantaged and can participate if they choose to do so.
- USCBC recommends that SEIs policies and projects be open to both domestic and foreign-invested enterprises – both in policy and in practice – at both the central and local level. We also encourage SEI policymakers to ensure that these policies do not violate international trade rules on national treatment or use discriminatory tools such as local IP requirements.

Introduction

Cloud computing. Electric vehicles. Gene-based drug therapies. The list of industries that China's central government planners aim to develop over the next decade is as impressive as the technologies are modern. In the mid-2000s, the central government began to repeatedly and publicly declare its intent to upgrade the economy away from traditional industries reliant on low-skilled labor. Since then, central government policy, funding, tax, and innovation efforts have consistently emphasized one goal: to develop a more advanced and technology-driven economy.

To accomplish this goal, Chinese policymakers created the concept of the strategic emerging industries (SEIs): seven innovative industries just beginning to develop in China, whose expansion could drive China's broader growth as an internationally competitive economy.[1]

The State Council – a government body equivalent to the United States' Cabinet – codified the importance of these industries in an October 2010 policy document. This document, the Decision on Accelerating the Development of Strategic Emerging Industries ("decision"), not only identified the specific industries the central government would target, but also established a quantitative target for SEIs to account for eight percent of GDP by 2015 and 15 percent by 2020.

The decision's most immediate impact was to signal to Chinese government agencies at all levels that future government policies on issues as broad ranging as taxation, human resources, and research and development (R&D) must support SEI development. Subsequent industrial policies at the central and local government levels have frequently referenced or target development of these designated industries.

China's 7 Strategic Emerging Industries

1. Energy efficient and environmental technologies
2. Next generation information technology (IT)
3. Biotechnology
4. High-end equipment manufacturing
5. New energy
6. New materials
7. New-energy vehicles (NEVs)

**See Appendix I for additional specifics*

Foreign companies have increasingly sought to understand how their business might align with market opportunities presented within the sectors slated for special government attention. However, companies have faced significant challenges in finding reliable information on SEI policies and implementation. This is often due to the opaque manner in which policies are being developed and the lack of explanations for how policies relate to each other.

SEI policy development has also been marked by a lack of coordination between government agencies, differing interpretations of central government directives, and varied implementation methods among localities. These factors, coupled with foreign companies' past experience with central government policies to promote innovative technologies, have raised some concern regarding the extent to which they will actually be allowed to take advantage of SEI-related market opportunities.

This paper provides a snapshot of SEI policies and practices in China, covering:

- Select central and local government policies that support the SEIs
- Specific examples of SEI implementation in different localities
- Central and local government policy tools to support the SEIs
- Challenges to foreign participation in the SEIs
- Recommendations to ensure full participation for foreign-invested companies in China's industrial modernization

[1] *"Wen Jiabao convenes and presides over third symposium on development of strategic and emerging industries," September 22, 2009 (http://www.gov.cn/ldhd/2009-09/22/content_1423493.htm); State Council Decision on Accelerating the Development of Strategic Emerging Industries, October 2010 (http://www.gov.cn/zwgk/2010-10/18/content_1724848.htm)*

Central Government Policies to Promote SEIs

SEI policy creation and implementation has followed a similar pattern to other broad policy plans in China, where the central government drafts general guidelines and principles and local governments handle direct implementation.

Combining knowledge of the top-down guidelines with an understanding of local conditions can help companies understand local government SEI implementation, and help to frame policy discussions with central and local officials.

Key Agencies

While a number of government agencies participate in the development of SEI policies, a handful of agencies play a lead role in overseeing and regulating the SEIs. The 12th Five Year Plan (FYP) on the Development of the Strategic Emerging Industries calls for the establishment of an inter-ministerial coordination group headed by the National Development and Reform Commission (NDRC). Additional members of the group include the ministries of Commerce (MOFCOM), Science and Technology (MOST), and Industry and Information Technology (MIIT). The purpose of this group is to coordinate, analyze, and track SEI policy implementation across relevant agencies. Some of the agencies that make up the group also have authority to approve projects at the municipal, provincial, and national level.

Overview of Selected Agencies involved in SEI Policy Creation

Central-Level Agency	Provincial-Level Equivalent	General Responsibilities
National Development and Reform Commission (NDRC)	Local-level NDRC offices are called "development and reform commissions" (DRCs)	• Leads central government coordination of SEI interagency work • Guides overall SEI policy development • Formulates core and follow-up SEI documents such as key SEI products and services catalogue
Ministry of Industry and Information Technology (MIIT)	Local-level MIIT offices are often referred to as "economic and information technology commissions" (EITCs)	• Plays significant role in developing specific plans for four of the seven SEIs: advanced equipment manufacturing; new materials; next generation information technology; and energy efficient technologies • Participates in SEI policy formulation within the interagency process and also develops its own SEI catalogues
Ministry of Commerce (MOFCOM)	Local-level MOFCOM offices are often referred to as "commerce commissions" (CCs) or "departments of commerce"	• Coordinates with other agencies to support SEI policy development and implementation
Ministry of Science and Technology (MOST)	Local-level MOST offices are called "science and technology commissions" (STCs)	• Coordinates with other agencies in SEI policy development with a particular focus on fostering domestic innovation and technology development • Supports SEI basic R&D • Administers national science & technology (S&T) grant funding programs

Overview of Selected Agencies involved in Strategic Emerging Industries		
Central-Level Agency	**Provincial Level Equivalent**	**General Responsibilities**
Ministry of Finance (MOF)	Local MOF offices are referred to as "departments of finance"	• Serves as the primary agency managing available funds for SEI development
State Intellectual Property Office (SIPO)	Local SIPO can be referred to as "intellectual property bureau" (IPB) or "intellectual property administration" (IPA)	• Focuses on emphasizing protecting intellectual property rights (IPR) within the SEIs • Coordinates with other agencies to protect IPR in SEI policy implementation

Within the government agencies that are broadly involved with SEI planning and implementation, various bureaus and departments have defined responsibilities, both for specific industries that fall under the SEI framework and for different elements of SEI implementation. Different agencies assign SEI-related responsibilities in different ways. For example, NDRC assigns much of its SEI-related oversight to the Department of High-Tech Industry, which maintains general oversight for promotion of all SEI industries based on its oversight of the IT, biotechnology, aerospace, new materials, new energy, marine, and high-tech services industries. Two other NDRC departments—the Department of Resource Conservation and Environmental Protection and the Department of Basic Industries—handle specialized pieces of the SEI landscape: energy efficiency and environmental protection, and high-end manufacturing related to transportation. In contrast, MIIT is more compartmentalized, with several separate departments responsible for planning, policy, and standards within their respective SEI sectors, such as the Department of Equipment Industry and the Department of Software Services.

Key Government Policies

Since 2010, various agencies have published SEI-related policy guidance:

- State Council Decision on Accelerating the Development of Strategic Emerging Industries (http://www.gov.cn/zwgk/2010-10/18/content_1724848.htm), October 2010
  - Identifies the seven specific strategic emerging industries (see Appendix 1 for more details on industry breakdown)
  - Establishes a quantitative target for SEIs to account for 8 percent of GDP by 2015 and 15 percent by 2020
  - Stresses that R&D and indigenous innovation are core features of SEI development

- NDRC Implementing Opinions on Encouraging and Guiding Private Enterprises to Develop the Strategic Emerging Industries (http://www.ndrc.gov.cn/zcfb/zcfbtz/2011tz/t20110815_428464.htm), July 2011
  - Policy framework governing private company participation in China's seven SEIs
  - Requires that future policies remove any existing market-entry thresholds—such as those governing registered capital, total investment, and land supply—that apply specifically to private companies
  - Requires that private companies have equal access to public financing and other government funds earmarked for SEI projects
  - Requires local officials and other relevant regulators to solicit comments from private enterprises on future policies and must take comments and recommendations "seriously"
  - Chinese term for "private" industry does not include foreign investment

- State Council 12th Five Year Plan (FYP) on Development of Strategic Emerging Industries (http://www.gov.cn/zwgk/2012-07/20/content_2187770.htm), July 2012
    - Taps NDRC as the leader of an interagency central government taskforce to develop national SEI plans and policies
    - Lays out detailed goals, sub-industry priorities, key projects, and supportive policies
    - Lists large projects the government wants to promote during the 12th FYP period (2011-15)

- MIIT Notice on the First Batch of Key SEI Technologies and Products for Targeted Promotion (also known as Notice 318, http://www.miit.gov.cn/n11293472/n11293832/n12843926/n13917012/14713132.html), July 2012
    - Contains two appended catalogues, one of SEI technologies and one of SEI products that potentially could be used as reference in SEI policy implementation (see Appendix 2 for more details)

- MIIT Classification Catalogue of Strategic Emerging Industries (http://www.miit.gov.cn/n11293472/n11293832/n12845605/n13916913/14990105.html), November 2012
    - Provides systematic identification of specific industries to be considered for SEI-related policy implementation

- MOF and NDRC Interim Measures for the Administration of Special Funds for Strategic Emerging Industries (http://jjs.mof.gov.cn/zhengwuxinxi/zhengcefagui/201301/t20130124_729883.html), December 2012
    - Manages and standardizes SEI funding allocation across central government agencies
    - Lays out principles to guide funding, stating that funding should be market-driven
    - Specifies that funding should facilitate significant technology breakthroughs, the industrialization of critical sectors, the establishment of industry value chains, and innovation-oriented development

- NDRC Guiding Catalogue for Strategic Emerging Industries' Key Products and Services (http://www.ndrc.gov.cn/zcfb/zcfbgg/2013gg/t20130307_531611.htm), February 2013
    - Provides detailed list of technologies and products under each SEI and its sub-sectors
    - Does not include specific policies, funding, additional investment incentives for companies or technologies, or any criteria or other information about how either foreign-invested or Chinese companies might be able to participate in the development of these products and services
    - Provides cover note to encourage investment in these sectors, and as a baseline for provinces and ministries to develop their own specific lists of SEI products and services

Provincial and municipal governments also have their own policies and regulations designed to promote the SEIs, including local catalogues, funding plans, project announcements, and regulations. To better understand local policies and implementation USCBC interviewed local government agencies and analyzed local SEI-related policies and regulations across 12 cities and provinces. Appendix 3 provides examples of SEI policies, funding, and implementation plans in these select provinces and cities.

Central and Local-Level Funding Tools to Promote the SEIs

The State Council's 2010 decision outlines broad measures to encourage SEI development and establishes the principle that financial subsidies will be a primary incentive to help companies conduct R&D and commercialize new technologies and products. Fiscal policy—particularly tax policy—will be a primary tool to support industry innovation and technology commercialization. Taken together, tax rebates and financial subsidies could be a significant boon to companies seeking to invest in SEI product development.

At the same time, central government officials have repeatedly made clear that most SEI support funding will not come from central government coffers. Ren Zhiwu, deputy director general of NDRC's High Technology Division, the department responsible for drafting NDRC's SEI catalogue, stressed in a speech to USCBC member companies in October 2012 that only about 25 percent of funding would come through the central government. The Interim Measures for the Administration of Special Funds for Strategic Emerging Industries, for example, emphasizes a combination of funding from various funding sources – including central government, local government, and private enterprises – to promote SEI technology and product development.

As a consequence, local governments will shoulder most of the financial responsibility to develop the SEIs in their region. In fact, the SEI 12th FYP requires each province to create its own special funding pool to promote SEI development. Local governments determine where subsidies will go according to local SEI supportive policies. Some provinces have already established their funds while others are still being formed.

Many provinces that may lack a specific SEI funding pool already offer local grants and subsidies through other programs that can be also used for SEI products or technologies. For example, the Hubei Special Fund for Major Science and Technology Projects; the Shanghai Special Fund for the Development of Major Projects of Indigenous Innovation and High & New Technology Industries; and the Jiangsu Special Fund for Software and Integrated Circuit Industries are examples of pre-existing local funding mechanisms that could also support SEI-related technology development.

Localities will decide their own methods for allocating funding, but past experience suggests many will likely use a combination of product catalogues and specific project proposals, as well as a competitive funding application process and other incentive programs such as High & New Technology Enterprises (HNTEs), to provide incentives.

USCBC interviews and research uncovered the following examples of local funding plans:

- Shanxi aims to set aside RMB 500 million ($80 million) annually as an SEI development fund.
- Tianjin aims to set up RMB 970 million ($156 million) fund to support commercialization of indigenous innovation and high-tech projects.
- Fujian plans to create a RMB 1 billion ($161 million) SEI venture capital fund.

Please refer to Appendix 3 for additional examples from USCBC interviews and research of local SEI policies, funding, and implementation plans across select provinces and cities.

Foreign Company Interest in Accessing SEI Funding
In USCBC's 2012 member survey, companies reported mixed ability to participate in China's SEI programs. Most respondents, 57 percent, reported that they have only been moderately successful in doing so. Just over a quarter indicated that they had good success and the remaining respondents, 17 percent, reported they had poor access.

Over several months in 2012, USCBC followed up with a number of companies to determine their views about and general experiences with local funding opportunities. Of the 23 companies interviewed, only about one-third of companies—eight of 23—indicated that they had applied for or had interest in applying for an SEI funding program. However, even among interested companies, half (four of eight) indicated that the local funds do not drive their strategy or investment decisions and are not vital to their business. Instead, companies viewed these funds as supplemental or as a means of countering competitors' use of local funds.

In comparison, nearly half of companies—11 of 23—indicated clearly that they have not applied for and have little interest in the financial incentives at all. Respondents indicated that this is based purely on business considerations and not out of concern that they lack information or may face discrimination. This includes companies that have mature investments and so are less influenced by new preferential policies or are uninterested in making new investments.

The remaining four companies indicated they were not interested in SEI financial incentives because the amounts involved were too small to justify the effort required (two cases) or the likelihood of successful qualification versus local competition was too low (two cases).

Foreign Participation in SEIs: Challenges and Recommendations

Senior central government leaders have made a number of high-profile public statements declaring that the SEIs are open to foreign participation. For example, Premier Wen Jiabao replied to a question during the Summer Davos Forum in September 2012 that foreign-invested enterprises (FIEs) operating in the SEIs will be treated the same as Chinese companies. NDRC Vice Chair Zhang Xiaoqiang echoed these comments in July 2012 interview when explaining that the 12th FYP on SEIs allows for a level playing field for both Chinese and foreign companies. NDRC's Ren Zhiwu told USCBC member companies in October 2012 that SEI policies would not discriminate against foreign-invested companies or the products they produce.

Despite these statements, past experience with Chinese tax, innovation, and government procurement-related policies has led companies to be concerned about the possibility that these new SEI policies may in practice create an uneven playing field by potentially giving preferences to Chinese companies.

Many USCBC companies argue that any benefits that are in practice available only to Chinese companies have long-term negative consequences for fair competition and the development of market-based economics—both in China and increasingly in third markets around the world—by giving Chinese companies a competitive edge over their foreign-invested counterparts.

USCBC member company concerns center on a number of topics, including the continued role of SEI product and technology catalogues, use of discriminatory intellectual property-based qualification criteria, links to government procurement incentives, lack of transparency in policy drafting and implementation, and localization requirements that would exclude branch entities. One step local governments can take to mitigate general concerns about preferences is to mandate—in writing—that incentives be granted in a non-discriminatory manner and to establish an independent appeals process to review claims of bias. Local governments can also expand upon central government commitments to increase transparency and publicize more information about what incentives are available and the qualification criteria used to determine accessibility.

The Role of Catalogues

Catalogues are a central feature of China's industrial planning system, outlining business and investment opportunities across all parts of the economy. Chinese government agencies at all levels have used catalogues for decades as a means to indicate what products and technologies are permitted, encouraged, or restricted for investment or purchase. For example, central and local governments update annual catalogues of products meeting energy efficiency requirements. These products may receive preference in government procurement or qualify the purchaser for a tax rebate.

The SEIs are no different, and both central and local agencies are developing product and technology catalogues. NDRC, for example, has the lead role in developing an SEI product catalogue, but MIIT has also been aggressive in publishing its own SEI-related catalogues. Local governments are also currently creating their own catalogues for industries in their region, which adds to the confusion for companies. While these catalogues are beginning to trickle out, it remains unclear what specific policies might be used to promote the technologies and products in these and other catalogues. For example, the catalogues do not indicate what benefits listed products receive. It is also unclear how the catalogues relate to each other and to other SEI-related policies, both at the national and at the local level. See Appendix 2 for a discussion of MIIT Notice 318 as an example of a catalogue.

Concerns and challenges that companies have raised about catalogues include:

- Lack of information about how the catalogues will be used.
- Lack of publicly available, clear, non-discriminatory criteria for how companies can get their products and technologies into a catalogue and how frequently catalogues will be updated.
- Whether a listing in a catalogue denotes preferential treatment for companies and their products. These concerns are bolstered by the fact that almost all companies listed are Chinese enterprises or Chinese-invested joint ventures.
- What special funding, if any, is provided to listed products. Conversations with local government officials indicate that locally developed SEI catalogues may be used as a reference for allocating special funding. Only companies that produce products and technologies that are described in the local SEI catalogue will be accredited and have access to these subsidies.

USCBC Recommendations

- USCBC recommends a long-term solution of eliminating the use of catalogues. Catalogues are no longer consistent with China's development toward a market-based economy, nor in line with international best practices. Catalogues are difficult to maintain and are quickly outdated, thus reducing their effectiveness of promoting innovative products and technologies.

- If catalogues are to continue to be used, USCBC recommends that central and local government agencies:
  - Provide a cover letter for each catalogue, similar to those often provided for new legislation, explaining how the catalogue was drafted and how companies may be able to suggest new technologies and products for future catalogues;
  - Specify the types of policies and incentives that would be available for products and technologies included in the catalogue and how companies may apply for those benefits;
  - Include information regarding the specific government agencies or representatives that may be contacted to address company questions or concerns; and
  - Specify the applicability of central government catalogues to local catalogues (and vice versa) along with instructions on how local governments should use central government catalogues in their own SEI efforts, especially as it relates to the selection of products or technologies for preferential treatment.

Local Government Use of Discriminatory IP Qualification Criteria

Though local government officials have affirmed in conversations with USCBC that they adhere to policies of equal treatment and a level playing field for foreign-invested enterprises, they also indicated that the central government has given clear instructions that the cultivation of locally developed and locally owned intellectual property rights (IPR) is a core component of SEI development. Put another way, promoting the SEIs is linked with promoting indigenous IP creation. As one municipal government official said, because it is the central government's clear intention to develop China's IP capabilities, IP requirements are not negotiable.

This has raised the prospect that access to SEI-related incentives, financial subsidies or otherwise, may be conditioned on the possession of intellectual property developed and/or owned in China, and would not permit companies to qualify based on possession and use of intellectual property developed and/or owned in other locations. As noted in USCBC's 2010 innovation incentive best practices report, neither the US nor any of the other nine top global innovative countries and regions are known to base participation in innovation incentive programs on domestic ownership of intellectual property rights or trademarks. Yet such requirements already exist as a part of China's HNTE tax program. Companies may qualify for a reduced corporate tax rate of 15 percent if they engage in certain advanced production, high-tech activities and own the IP in China. While some foreign companies have chosen to structure their operations so they can own IP in China and qualify for the reduced tax rate, government requirements to own IP in a certain jurisdiction go against international best practices for IP creation and management.

Because local governments must establish their own plans and funding pools to develop the SEIs in their region, evidence suggests that many local SEI promotion policies may ultimately include IP requirements. For example:

- Shanghai's SEI fund is a carve-out of a larger indigenous innovation and high-tech special fund, which requires local IP ownership and local legal presence to qualify for funding. In addition, wholly foreign-owned R&D centers may not be approved for SEI research projects unless they independently own the IP.

- Sichuan local agencies expressed differing opinions on the question of IP criteria. According to the Sichuan economic and information technology commission, there are IP requirements in Sichuan for SEI project applications. However, the Sichuan development and reform commission indicated that any company applying for SEI special funding only needs to be legally registered and pay taxes in Sichuan. Development and reform commission officials emphasized, however, that for SEI special funds, the goal is to develop independent IP to replace imported equipment and create capacity for Chinese companies in those areas.

USCBC Recommendations

- Central government agencies should mandate the removal of IP ownership qualification criteria from all central and local government incentive programs, including the HNTE tax program and SEI promotion policies. Short of this, the requirement should be amended to allow for non-exclusive licenses to Chinese affiliates.

- Companies should evaluate carefully the value in developing IP in China and/or transferring to China the license for their IP.

Transparency

The lack of publicly available, consistent information about SEI plans, catalogues, and projects has made it difficult for interested parties to gain a deeper understanding of what the government is doing and how to take advantage of available commercial opportunities. Slightly more than half of respondents to

USCBC's annual survey, conducted in the summer of 2012, indicated that they had some difficulty getting information about the industries being promoted and the types of incentives offered and had mixed experiences in turning information leads into business development opportunities. This situation means that companies must expend significant time and personnel resources to understand disparate local implementation methods.

There are three transparency challenges of particular concern:

- **Lack of online documentation** When USCBC spoke with local officials to assess SEI implementation strategies, the majority said relevant SEI documents had been put online. Generally speaking, a more robust and transparent web presence often indicated a greater willingness among local officials to discuss policies. However, after navigating provincial government websites, USCBC found that locating these documents was extremely challenging, and in many cases policies could not be found at all. Some websites had no documentation, or documents that were months out of date. Some websites lacked basic search functions, further inhibiting information access. It was not unusual to find relevant provincial SEI documents from lower level government websites that were not posted on the websites of the upper-level issuing agencies, thus creating confusion about the validity of various policies.

- **Lack of clear authority structure for implementation agencies** At the national level, NDRC leads SEI policy development, with other agencies such as MIIT and MOST playing supporting, albeit important, roles. However, local implementation largely depends on each agency's initiative and authority. This decentralization of SEI implementation responsibilities has made it very confusing for companies to know with whom they must talk in order to learn about SEI plans for that area. In some localities, such as Shanghai, the economic and information technology commission has taken the leadership role in SEI policy development and implementation, while other regions, such as Shandong, the science and technology commission is driving local policy development and implementation.

  When formulating plans to implement national policy, local governments often set up interagency "leading groups" that gather senior officials from agencies that might have significant involvement in that topic. These leading groups do not deal with substantive implementation questions; rather, they serve as a platform for involved agencies to coordinate their work, leaving specific implementation work details up to the individual agencies in question. Because each province operates largely independently, interagency communication and coordination varies significantly among provinces. Moreover, local departments are often in competition with each other over final authority to implement SEI plans. Additionally, in some localities, only one person in a particular department handles questions related to SEI implementation, while other departments may be unaware of the process. In other cases, different departments oversee SEI development for industries that otherwise come under their jurisdiction, such as new energy, which usually falls to the local development and reform commission. Funding management also varies by locality: in Anhui, for example, the local development and reform commission works with the finance department to coordinate the management of funds while in Jiangsu, each relevant department takes charge of its own funds.

- **Officials' willingness to discuss policies** Local officials' willingness to discuss SEI policies for their jurisdictions varied greatly, reflecting everything from a lack of awareness of the plans in their region to concern about disclosing potentially sensitive information, even if it was posted publicly on a government website. Officials across multiple agencies in some locations, such as Beijing and Zhejiang, were unwilling to share information and refused to discuss SEI plans. Conversely, Hubei showed a strong willingness to answer questions about local SEI plans, as was also the case in Shanghai, which is frequently cited for a high level of transparency and cooperation with foreign enterprises.

USCBC Recommendations

- Provincial governments should develop a clear reporting system to track and ensure all information related to SEI policy is posted on official provincial as well as municipal government websites, including the process for companies to apply for inclusion in a local catalogue, qualification criteria, funding information, pilot projects, government contact information, etc.

- Companies interested in learning more about a particular province's SEI plans should map out the possible local government agencies involved in SEI policy formulation and execution and develop regular contact with them to ensure access to the latest information.

- Because different localities have varying approaches to SEI implementation and often divide implementation authority, companies should carefully research which agencies have responsibility for their industry and product. Sometimes responsibility will align with the agency's normal jurisdiction, such as the local branch of the Ministry of Health (MOH) managing bio-pharmaceuticals. But depending on the province, another agency such as local development and reform commissions or economic and information technology commissions may instead manage this portfolio. Companies should be aware of agency authority and more clearly target specific departments. With a better understanding of agency responsibilities, companies will be better equipped to handle "buck-passing" among different agencies.

Links with Government Procurement

Central government policy planners have used access to China's lucrative government procurement market as a means to promote certain technologies or brands. Some of these programs are well-established and are generally considered non-discriminatory. For example, central and local governments maintain lists of products that have met certain energy-efficient and environmentally friendly criteria. Some foreign companies have been able to get their products on these lists via foreign-invested subsidiaries. On the other hand, certain government procurement requirements disadvantage foreign companies, such as the announcement in 2012 that government agencies must only purchase domestic Chinese auto brands for their office fleet. That notice also prompted several municipal and provincial governments to issue their own notices mandating the purchase of Chinese brands, rather than brands produced by foreign joint ventures – thus compounding the situation.[2]

While the central government has made general public statements about the important role of market forces within government procurement to promote new technologies, there is still concern that government procurement will benefit Chinese companies operating in SEI industries, particularly at the local level. For example, when responding to USCBC questions about local SEI development, Jiangsu provincial officials emphasized that they view government procurement as playing an important role in promoting SEI products and technologies. They argued that SEI products and services are new innovations that do not yet have an established market in China. Consequently, such procurement is a necessary tool to promote SEI growth. Nevertheless, without more details on how the procurement will be managed and what criteria will be required to qualify, it remains unclear whether local procurement will give more preferences to Chinese companies over foreign-invested companies.

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[2] http://news.china.com/zh_cn/domestic/945/20130204/17668135.html;
http://autos.cn.yahoo.com/ypen/20130204/1591918.html

For more information about China's government procurement system, please see USCBC's government procurement report: https://www.uschina.org/members/documents/2012/11/government-procurement.pdf.

USCBC Recommendations

- Local governments should provide more information about their procurement practices and actively promote the long-term benefits of an open, transparent, market-based procurement system by mandating the removal of unwritten quotas that require local government agencies to purchase brands that are majority or wholly Chinese-owned.

- Local governments should continue work to improve the independence and effectiveness of the local appeals process for government procurement.

- Companies should actively seek out and engage stakeholders, both to educate them on product specifications and to gain leads on possible upcoming bids.

Local Registration Requirements

Many local regulations require applicants for funding to be registered as legal entities in the province, thus excluding branch offices. While it is not surprising from a tax perspective that local governments would give preference to full legal entities rather than branches, most companies, regardless of nationality, prefer to minimize the creation of duplicative legal and financial entities by using branch offices of one legally-registered entity. Local requirements to be a legal entity may have an especially negative influence on the development of R&D capabilities in a municipality—even though fostering more R&D is a key priority of the SEI plans— because R&D centers are often established as branches of an existing entity.

USCBC Recommendation

- Local governments should amend provisions to allow branches of existing legal entities to qualify for any local incentives.

Conclusion

SEIs will remain a centerpiece of China's industrial development plans for many years to come. Given the relative newness of the overall SEI policies central and local governments are still exploring ways to implement SEI development policies, which may likely result in some confusion and potential implementation bottlenecks as localities put plans into action and clarify policies. At the same time, China's dynamic market is such that companies interested in capitalizing on selling into the market risk losing opportunities if they wait until the path is clearly defined.

China's local governments have long utilized different strategies to implement central policy goals and therefore a reasonable degree of difference among local plans is to be expected. Nevertheless, USCBC recommends that SEI policies should be open to both Chinese and foreign-invested enterprises at both the central and local level, should not violate trade rules vis-à-vis offshore foreign companies, and should not use discriminatory tools such as local IP requirements. Non-discriminatory policies would benefit China by making the most advanced and efficient technologies available in SEI sectors at the most reasonable prices. Pursuing these recommendations will address the broader need to create an open, non-discriminatory business environment in China that does not favor one group of companies over another. USCBC will continue to monitor SEI implementation plans and report information to its member companies.

APPENDIX 1: Outline of the Seven Strategic Emerging Industries and Selected Subsectors

Energy efficiency and environmental conservation

- Research, develop, and promote energy-efficient technology products in order to make technology breakthroughs and raise overall energy efficiency;
- Accelerate the R&D and production of broadly applicable technology that can be used for resource recycling and remanufacturing industrialization;
- Test and promote advanced environmental technologies and products;
- Promote a market-oriented service system for environmental protection and energy efficiency;
- Employ advanced technology to create a recycling system for waste commodities; and
- Promote clean coal and seawater use.

Next generation information technology

- Accelerate the construction of vast, integrated, and safe information network facilities, promote the R&D and production of new-generation mobile communication, as well as core equipment and intelligent terminals for next-generation Internet;
- Accelerate the convergence of telecom, broadcasting, and Internet networks; promote R&D in the "Internet of things" and cloud computing;
- Focus on developing core and basic sectors such as integrated circuits, new-mode displays, high-end software, and high-end servers;
- Upgrade software and value-added Internet services; promote smart renovation of infrastructure; and
- Develop digital and virtual technologies to promote creative industries.

Biotechnology

- Develop biotech-derived pharmaceuticals, new vaccines, diagnostic reagents, chemical drugs, modern Chinese medicine, and innovative drugs that prevent major critical diseases;
- Accelerate the R&D, production, and large-scale development of biological and medical engineering products such as medical equipment and medical materials;
- Promote bio-agriculture development, including the biological breeding industry, green agriculture, and biological production;
- Advance the exploration, demonstration, and application of core technologies in biological manufacturing; and
- Accelerate the R&D and production of marine biology technologies and products.

High-end equipment manufacturing

- Strengthen and expand the aviation industry, focusing on the development of key aviation equipment for trunk line and regional flights as well as utility aircraft;
- Promote aerospace infrastructure construction to develop satellites and related industries;
- Develop rail equipment used during the construction of passenger lines and urban metro systems;
- Develop marine engineering equipment to develop marine resources; and
- Develop intelligent manufacturing equipment with digitally-integrated systems as core components.

New energy

- Research and develop new-generation nuclear power technology and advanced reactors;
- Accelerate the application of solar-power technologies and explore diversified power-generation markets of solar photovoltaic and photo-thermal energy;
- Improve wind-power technology equipment to promote large-scale development of wind power and to develop an intelligent grid as well as new-energy systems; and
- Explore and use biomass energy according to local conditions.

New materials

- Develop new materials such as rare earths, high-performance membrane materials, special glass, functional ceramics, and semiconductor lighting materials;
- Develop advanced structural materials, such as high-quality special steel, new-mode alloy material, and engineering plastics;
- Develop high-performance fiber and composite materials, such as carbon fiber, aramid fiber, and ultra-high molecular weight polyethylene; and
- Research general and basic materials such as nano-, super-conductor, and intelligent materials.

New-energy vehicles

- Make core technology breakthroughs in motor batteries, drive motors, and electronic controls to promote the application and commercialization of plug-in hybrid and pure electric vehicles; and
- Research leading and core technologies for fuel-cell vehicles; and vigorously promote low-emissions, energy-efficient vehicles.

Source: PRC State Council Decisions on Accelerating the Development of Strategic Emerging Industries; Adapted from USCBC China Market Intelligence (https://www.uschina.org/members/publications/cmi/2010/october/27/02.html)

APPENDIX 2: Catalogue Example, MIIT Notice 318

MIIT Notice 318 attracted attention in 2012 because of its focus on SEIs, but in actuality provided limited information about what its purpose and function. The notice appears to provide guidance to provinces and local governments on how to promote SEIs, and its catalogues list existing policies and programs that appear to support the development of certain SEI technologies and products. However, the notice provided little context for these policies or how they would be used. Additionally, the catalogues listed specific companies, universities, and R&D centers that presumably would be involved with SEI development, but included no information about how these companies were selected and what their listing meant in terms of incentives.

To better assess how the notice will be used, USCBC reviewed several of the policies listed in the notice's catalogues. These policies were issued by a variety of agencies, including local-level branches of NDRC, MIIT, MOF, and the Ministry of Science and Technology (MOST), suggesting that local agencies each have their own industry promotion mechanisms. Most of these programs appear to be grant or funding programs. Many of the documents contained qualification requirements that could discriminate against foreign-invested enterprises seeking funding: requirements that companies have locally owned or registered IP and/or requirements that eligible companies must be a locally-incorporated company, not a branch. This latter criterion would not only discriminate against some foreign-invested companies, but also Chinese companies from other provinces.

Concerns about discrimination were also raised by the inclusion of companies in the catalogues themselves, and in the lack of transparency about how foreign companies might be considered for the catalogue. USCBC research indicates that only a small portion of the approximately 900 companies listed in the notice's two catalogues are foreign-invested enterprises, and the vast majority of these are joint ventures. Further, it appears that there was no public notice about the drafting of this catalogue, nor were opportunities provided to companies to apply for inclusion in the product and technology catalogues appended to the notice. While some conversations with local officials indicated that MIIT may have created this list of companies based on companies already participating in existing programs such as High and New-Technology Enterprise (HNTE) certification, R&D grant and funding programs, and earlier local technology catalogues, there is no clear information about how decisions were made to include companies (or universities and research institutions) in that list.

Because the notice contains only these lists of policies and companies, companies must still review the specific policies for their locality and their products to determine whether these policies contain programs, such as grants, tax incentives, government procurement preferences, or subsidies that are open to foreign-invested enterprises.

APPENDIX 3: SEI Implementation in Selected Provinces and Cities

Chinese local governments seldom move at the same pace as the national government, and the opinions of local senior provincial-level leaders often are the most important determining factor in shaping local SEI promotion. Consequently, SEI implementation varies significantly across China. To better understand local policies and implementation, USCBC interviewed local government agencies and analyzed local SEI-related policies and regulations in 12 cities and provinces throughout late 2012. Findings about which industries are promoted, agencies involved, funding amounts, and use of catalogues, are described here and listed in the attached chart.

In general, the types of documents guiding local implementation might include local 12th FYPs, industry-specific SEI promotion plans, and catalogues. For example:

- Localities like Shanghai have released an overarching 12th FYP on Strategic Emerging Industries, while localities like Jiangxi, only released individual plans for each of their selected SEIs.
- Hunan published the General Outline on Accelerating SEI Development rather than an FYP. The outline provides general macro-guidance on implementation. The Hunan provincial government has also made individual plans for each targeted industry.

Local governments are setting their own categories of SEIs depending on local industry characteristics and existing industry plans. The variations reveal local preferences about future economic development and perceived competitive advantages for the market. For example, Hunan, known for its entertainment industry, replaced NEVs with "cultural innovation" (such as cartoon digitalization) in its selection of SEIs.

In addition, some localities have made priority distinctions even among the seven SEIs, with those on the preferred list receiving more funding. Among Sichuan's six SEIs, next-generation information technology holds the top priority and is expected to receive upwards of 25 percent of Sichuan's specially designated SEI funding.

Many localities have noted that there are a variety of incentives available to potential investors. These include priority land use (especially in eastern regions where land is in short supply); expedited licensing approvals; reduced costs for and preferential access to public utilities; and "talent support" policies, such as housing subsidies. All local officials stressed that local preferential policies are decided case-by-case, and expressed a strong willingness to work with companies individually to explore incentive and funding opportunities; therefore, companies should pay close attention to local policy documents, catalogues, and funding notices, and they should actively meet with local officials to determine what opportunities might be available. Local officials also stressed, however, that industries in which foreign investment is restricted or prohibited will not be more open due to SEI development. Foreign investment will still be regulated primarily by policies like the Catalogue Guiding Foreign Investment, to which SEI policies are subordinate.

The following chart details SEI implementation in selected provinces and municipalities.

SEI Policies and Actions in Select Provinces/Cities						
Provinces/ Cities	**Number of SEIs**	**Variations on Centrally Targeted SEIs**	**Key Agencies**	**Funding**	**Use of Catalogues**	**Other Features**
Beijing	8	Stronger focus on aviation industry	DRC takes the leading role in SEI development, but specific responsibilities for each agency are not clearly defined	• RMB 40 billion ($6.4 billion) financial support • Will establish a "Guiding Fund for SEI Venture Capital investment"	N/A	N/A
Fujian	7	• Does not include new-energy vehicles • Combines biology with new medicine • Adds the high and new technology marine industry	Fujian EITC, DRC, STC, commerce, finance, transportation, and environment departments share responsibilities as assigned by Fujian provincial government: • Next generation IT – EITC • New materials – DRC, STC, EITC • Advanced equipment manufacturing – CC • Energy efficiency and environment protection – CC, EITC • New energy – EITC, DRC, STC, CC, transportation bureau • Biology with new medicine – STC, DRC, CC • High and new-technology marine industry – CC, STC, department of marine and fishery	• RMB 500 million ($80.4 million) for SEI guiding funds • RMB 1 billion ($160.7 million) SEI venture capital fund • Fujian will invest more than RMB 128 billion ($20.6 billion) on over 100 major SEI programs	Fujian DRC and EITC developed an SEI key products and services guiding catalogue.	Developed an SEI Key Project List, selecting 100 key SEI projects.
Hubei	7	Same as the central government's list	Established an SEI development leading group to guide and coordinate implementation	N/A	The Hubei Statistics Department and DRC are drafting a local SEI products and services catalogue, according to one local official. The catalogue is still under review as of March 2013, and it is unclear to what extent it will mimic the national SEI catalogue.	Hubei DRC is building an SEI project pool, a database of qualified SEI projects that will be used for SEI policy reference and as a fund allocation mechanism. Companies are encouraged to apply directly to the relevant district or city level agencies

SEI Policies and Actions in Select Provinces/Cities						
Provinces/ Cities	**Number of SEIs**	**Variations on Centrally Targeted SEIs**	**Key Agencies**	**Funding**	**Use of Catalogues**	**Other Features**
						where they operate to join the pool. Hubei also introduced the IPR Protection Work Responsibility Break-down Plan for SEIs in July 2012 to emphasize that provincial agencies have specific responsibilities to protect IP. In addition, SEI IP protection has been listed as an annual work priority for involved agencies, including the provincial DRC and EITC. This is an unusual example among all researched provinces and municipalities, as IPR protection is now linked to local department performance indicators and given priority.
Hunan	7	Replaces new-energy vehicles with cultural innovation	• Hunan's SEIs are coordinated by local EITC, DRC, STC, and the local commission governing state-owned enterprises • EITC and the provincial finance bureau have responsibility for compiling projects, planning, arranging, and coordinating funds management • All special funds, regardless of industry, are managed by Hunan EITC • DRC has the lead on certain SEIs, such as new materials and new energy	Aims to allocate RMB 500 million (USD $80.4 million) annually.	Hunan has released several catalogues, including the SEI Key Technologies Catalogue, Key Products Catalogue (not available online), and the Top 100 SEI Companies List. According to one local official, companies will not be allowed to apply to be listed in the catalogue; instead lower-level governments (city or district) will collect all information based on companies' output value and technology level and submit the information to the provincial level, which will select companies for inclusion in the catalogue. It is still unclear how these catalogues are linked with SEI supporting policies, since much information is not publicly available and local departments couldn't clarify.	N/A

SEI Policies and Actions in Select Provinces/Cities						
Provinces/ Cities	**Number of SEIs**	**Variations on Centrally Targeted SEIs**	**Key Agencies**	**Funding**	**Use of Catalogues**	**Other Features**
Jiangsu	10	• Adds new medicine to biotechnology • Under next-generation IT, adds software, and places specific emphasis on the Internet of things, cloud computing, smart grid, and marine engineering equipment	• Jiangsu DRC coordinates new energy, smart grid, and new-energy vehicles • Jiangsu STC coordinates new materials, new medicine, and biotechnology, • Jiangsu EITC manages energy efficiency and environmental protection, Internet of things and cloud computing, next-generation IT and software, advanced equipment manufacturing, and marine engineering equipment	Current fund was established in 2012 with RMB 380 million ($61.1 million).	According to provincial development and reform officials, Jiangsu has already issued 10 individual SEI promotion action plans and is in the process of developing Jiangsu SEI guidelines. These guidelines will not be mandatory and will be used only for guidance for relevant industries. Jiangsu's SEI action plans identify several key enterprises that may be eligible for SEI preferential policies, as these companies' names appear in the action plans. Local officials explained that the key enterprise list will be used as a guide when companies apply for production expansion, in order to reduce the risk of overcapacity in a particular industry. However, according to government officials, there are no financial subsidies available for industries included in this list. To be included in the enterprise list, an enterprise must be an international brand and own indigenous independent IP.	As Jiangsu is a province with varying levels of economic development, implementation plans are segregated by region. These distinctions may cause policies to be implemented differently across the province, according to local development needs. For example, northern Jiangsu is less developed, so there may be more opportunity to negotiate with local governments on requirements in that region. Moreover, local government support could also differ according to municipal capability.

Jiangxi	10	• Re-divides SEIs into:
		  o Photovoltaic cells
		  o New-energy vehicles and batteries
		  o Energy efficiency lights and photoelectricity
		  o New materials: metals
		  o New materials: non-metals
		  o Biomedicine and new medicine
		  o Wind power and energy saving technology
		  o Aviation manufacturing
		• Adds "green" food and agriculture, as well as the cultural and creative industries
			• Jiangxi EITC, DRC, and STC have various roles in SEI promotion
			• New energy is supervised by Jiangxi DRC
			• Jiangxi EITC administers the remaining SEIs and established a new internal division – "emerging industry division" – to manage SEI work
			• The Jiangxi Culture Department oversees the cultural and creative industries
				Established a RMB 400 million ($64.3 million) venture capital fund to be used for major projects, overseen by a management commission created to guide fund disbursement.	Conversations with Jiangxi local government officials indicated that except for the local 12th FYPs, all other policies are still under draft and are open for comments. No catalogue, direct subsidies, or pilot programs have yet been developed.	Discussions with Jiangxi DRC officials indicated that foreign-invested companies may participate in some SEI projects but will be ineligible for subsidies, which are set aside for Chinese companies. Subsidy provisions will not be written formally into any policy.

SEI Policies and Actions in Select Provinces/Cities						
Provinces/ Cities	**Number of SEIs**	**Variations on Centrally Targeted SEIs**	**Key Agencies**	**Funding**	**Use of Catalogues**	**Other Features**
Shandong	6	• Does not include new-energy vehicles • Combines new energy with energy efficiency and environmental conservation • Adds new medicine to biotechnology • Adds marine development	Established an SEI special working commission in order to push forward SEI development.	Aims to invest no less than RMB 1 billion ($160.7 million).	Shandong DRC released the first "SEI Major Programs Catalogue" in 2010 detailing 10 methods to encourage private sectors to develop SEI.	Shandong's 12th FYP on SEIs identifies priorities for each SEI.
Shanghai	7	Same as the central government	• Shanghai EITC is the primary agency driving local SEI implementation • Shanghai DRC manages and creates local SEI policies, approves large scale SEI projects, and coordinates with other government agencies for six of the seven SEIs • The only exception is the pharmaceuticals and biotechnologies sector, which is handled by Shanghai STC	Set up a "special fund for technological transformation" to encourage companies to update equipment and facilities. Companies that are approved for funding can obtain a maximum of RMB 50 million ($7.9 million) in subsidies for this "technological transformation."	Shanghai EITC officials indicate that they are drafting plans for 15 specific policies, including a specific guiding catalogue on each SEI as well as other implementing policies. The catalogue will be revised every 2-3 years and may only be used as a minimum technology reference standard for SEIs. Companies will have an opportunity to recommend additional advanced technologies or products to be listed in the subsequent revisions of the catalogue. Even if some products are not included in the initial catalogue, companies may still have the opportunity to have access to preferential policies if they can persuade local government officials that their products exceed minimum technical standards laid out in the catalogue.	Shanghai EITC created a "green channel" to expedite SEI project approvals. The municipal government is also experimenting with new ways to attract foreign investment. For example, if an SEI project is established but does not qualify as "encouraged" in the Catalogue Guiding Foreign Investment, it may be permitted to benefit from preferential policies that technically may only be available those investments listed as encouraged. Preferential access to land is another benefit.
Shanxi	9	Adds coalbed methane and modern coal-to-chemicals	Shanxi DRC leads the SEI interagency coordination working group	• Aims to set aside RMB 500 million ($80.4 million) annually as an industry development fund • Will use the existing Shanxi "Energy Industry Investment" fund to support energy-related new technology development and investment. That fund has around RMB 10 billion ($1.6 billion)	N/A	SEI development is closely related to the Shanxi government's strategy of developing the energy sector, especially coal.

SEI Policies and Actions in Select Provinces/Cities						
Provinces/ Cities	**Number of SEIs**	**Variations on Centrally Targeted SEIs**	**Key Agencies**	**Funding**	**Use of Catalogues**	**Other Features**
				• Established venture capital fund in 2012		
Sichuan	6	Does not include new-energy vehicles	• Sichuan EITC manages next-generation information technology, high-end equipment manufacturing, and new materials • Sichuan DRC supervises the new energy industry as well as energy efficiency and environmental conservation • Sichuan STC is in charge of biotechnology	• Plans to invest RMB 2 billion ($321.5 million) o IT will receive 25 percent of funding o High-end equipment manufacturing and new materials industries should each receive 20 percent of funding o New energy should receive 15 percent of funding o Energy conservation and environmental protection, and pharmaceuticals and biotechnologies should receive about 10 percent each	Sichuan EITC released a local SEI Key Products and Services Catalogue, which covers approximately 100 products. (In contrast, the NDRC Catalogue contains about 4,000 products.) The catalogue is supposed to be reviewed every year, but according to media reports, it was not discussed in 2012. Sichuan also released the Work Plan on SEI Promotion and Administrative Measures on Use of SEI Special Funds in 2012.	Sichuan gives SEI projects priority in land use, energy, transportation, and financing. Sichuan EITC established the SEI Promotion Association to inform companies of SEI preferential policies available in Sichuan. The group also trains companies on how to apply for such policies. However, companies are only eligible for membership if their products are listed in Sichuan's SEI Catalogue.
Tianjin	7	Official list is same as the central government, though local government will promote the aerospace and aviation industry rather than NEVs.	• Departments maintain responsibility for the industries under their current purview • An interagency leading group is under formation	• Tianijn's Binhai New Area pledged RMB 50 million ($8 million) to support SEI projects • Aims to set up RMB 970 million ($156 million) fund to support commercialization of indigenous innovation and high-tech projects	The Tianjin municipal government completed a draft of the 12th FYP on Strategic Emerging Industries, but it has not yet been publicly released. According to local officials, there are only minor differences between the municipality's SEI priorities and national ones.	In May 2012, Tianjin signed a cooperative framework agreement with MIIT to support Tianjin's SEIs. According to this agreement, Tianjin and MIIT will work together to cultivate a competitive SEI cluster. This ministry-municipal cooperation is expected to provide special support in local development, which suggests more support could come from the ministry to Tianjin's SEIs. Currently it appears Tianjin is the only municipality with such an agreement with MIIT.
Zhejiang	9	Adds Internet of Things and the marine industry as full SEIs	• The Zhejiang SEI Promotion Leading Group was set up in 2012	Set up a RMB 500 million ($80.4 million) SEI special fund	Zhejiang EITC issued local SEI catalogue in November 2011. This catalogue identified 40 key areas in nine SEIs for government support.	N/A

SEI Policies and Actions in Select Provinces/Cities						
Provinces/ Cities	**Number of SEIs**	**Variations on Centrally Targeted SEIs**	**Key Agencies**	**Funding**	**Use of Catalogues**	**Other Features**
			• Zhejiang DRC leads interagency coordination • Provincial finance bureau and EITC are in charge of subsidy funds for technology innovation pilot projects			

ACRONYMS
CC: commerce commission
DRC: development and reform commission
EITC: economic and information technology commission
STC: science and technology commission

Local policy documents:

1. Beijing Implementation Opinions for Accelerating Development of Strategic Emerging Industries
   http://www.gov.cn/gzdt/2011-09/06/content_1941134.htm
2. Beijing Interim Measures on the Administration of Strategic Emerging Industries Venture Capital Guidance Funds
   http://www.bjpc.gov.cn/zcfg10/201206/t3071551.htm
3. Fujian Implementation Plan for Accelerating Strategic Emerging Industry Development
   http://www.fujian.gov.cn/zwgk/zxwj/szfwj/201112/t20111220_436776.htm
4. Hubei Special Funds for Major Science and Technology Projects
   http://www.hbstd.gov.cn/info.jsp?id=7638
5. Hubei Opinions on Accelerating Strategic Emerging Industries Development
   http://www.ezjw.gov.cn/ArticleShow.asp?infoid=2840
6. Hubei 12th FYP on Strategic Emerging Industries Development
   http://gkml.hubei.gov.cn/auto5472/auto5473/201205/t20120525_376268.html
7. Hubei Development and Reform Commission Announcement of Applying for 2013 Strategic Emerging Industries Projects and Important Early Stage Projects
   http://www.tmfgw.gov.cn/gongzuodongtai/gongyejingji/710/
8. Hunan Strategic Emerging Industries Special Plan for New Materials Industry
   http://www.hnfgw.gov.cn/hgzh/zdzxgh/12496.html
9. Hunan Decision on Accelerating Strategic Emerging Industries Development

http://finance.sina.com.cn/roll/20100913/09038648370.shtml
10. Hunan General Outline for Accelerating Strategic Emerging Industries Development
http://www.hnfgw.gov.cn/hgzh/zdzxgh/12493.html
11. Jiangsu Province 12th FYP to Develop Strategic Emerging Industries
http://www.ydfgw.gov.cn/Article/ShowArticle.asp?ArticleID=392
12. Jiangsu Special Funds on Software and Integrate Circuit Industries
http://www.taiwan.cn/flfg/dffgdfgz/js/201112/t20111215_2214969.htm?randid=0.5482974260321047
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http://zc.k8008.com/html/zhejiang/shengrenminzhengfu/2012/1108/596293.html
14. Jiangsu 12th FYP on Strategic Emerging Industries
http://guoqing.china.com.cn/gbbg/2012-07/06/content_25837900.htm
15. Jiangsu 12th FYP for Electronic Information Industry
http://www.jseic.gov.cn/xwzx/gwgg/gwfb/201205/t20120509_111918.html
16. Jiangsu 12th FYP for Internet of Things Industry
http://www.jseic.gov.cn/xwzx/gwgg/gwfb/201205/t20120509_111915.html
17. Jiangxi Provincial Notice on Ten Strategic Emerging Industries Development Plans
http://www.doc88.com/p-895572504877.html
18. Jiangxi Interim Measures on the Administration of Strategic Emerging Industries Venture Capital Guidance Funds
http://www.jiangxi.gov.cn/zfgz/wjfg/szfbgtwj/201206/t20120617_741004.htm
19. Shandong 12th FYP for Strategic Emerging Industries Development
http://www2.shandong.gov.cn/art/2012/11/15/art_3883_3118.html
20. Shandong Implementation Opinions on Accelerating Development of Strategic Emerging Industries and First Batch of Strategic Emerging Industries Projects
http://gov.sdnews.com.cn/2011/5/4/1063434.html
21. Shandong Third Batch of Strategic Emerging Industries Projects List
http://www.sdjw.gov.cn/art/2013/1/14/art_148_152061.html
22. Shanghai Special Funds on the Development of Major Projects of Indigenous Innovation and High & New Technology Industries
http://www.sheitc.gov.cn/0105021602/656936.htm
23. Shanghai Strategic Emerging Industries Development Special Funds Administrative Measures
http://www.shanghai.gov.cn/shanghai/node2314/node2319/node12344/u26ai33090.html
24. Shanghai 12th FYP on Strategic Emerging Industries
http://www.shanghai.gov.cn/shanghai/node2314/node2319/node2404/node29352/node29353/u26ai30764.html
25. Shanxi 12th FYP on Strategic Emerging Industries
http://gjss.ndrc.gov.cn/zcgh/dfghzc/gdxggh/t20120328_471645.htm
26. Shanxi 2011 High-tech Industries Development Special Funds Application Guidelines
http://www.sndrc.gov.cn/showfileOld.jsp?ID=12838
27. Sichuan 12th FYP for Strategic Emerging Industries Development

http://www.sc.gov.cn/10462/10883/11066/2011/11/17/10189851.shtml
28. Sichuan Administrative Measures for the Use of Strategic Emerging Industries Special Funds http://www.sc.gov.cn/10462/10883/11066/2012/4/13/10206412.shtml
29. Sichuan Strategic Emerging Industries (Product) Development Guiding Catalogue (2012) http://jw.scsn.gov.cn/jw/ShowArticle.asp?ArticleID=3624
30. Zhejiang Interim Measures for the Administration of Strategic Emerging Industries Special Funds http://www.zjczt.gov.cn/pub/zjsczt/zwgk/zcfg/zxwj/201205/t20120523_279500.htm

