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Chinese Industrial Actors in Global Rule Making

A Preliminary Exploration

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Key Points

- In contrast to the growing profile of the Chinese government in global governance, the engagement of Chinese industrial actors in global rule making is quite limited and uneven. Some Chinese industrial leaders have shown an ambition to participate in global rule making in their respective realms; most of the others still lack interest or capacity.
- This policy brief identifies three plausible sources of variation among the Chinese industrial actors.
- It offers suggestions to Chinese industrial actors and to those concerned about China's role in global governance, with the purpose of reducing misunderstanding and building trust between Chinese industrial actors and businesses, regulators, non-governmental organizations (NGOs), and stakeholders from other parts of the world in developing global standards for good governance.

Introduction

The last few years have seen a dramatic shift in the gesturing of the world's two largest economies on global governance. Under President Donald Trump, the United States has withdrawn from its traditional leadership role in many areas, ranging from trade to arms control and from fighting climate change to taking in international refugees. On the other hand, China, led by its ambitious leader, President Xi Jinping, has shown growing interest in assuming a greater role in global governance. At the 2015 Chinese Communist Party Central Conference on Work Relating to Foreign Affairs, Xi explicitly called for China to "lead the reform of the global governance system with the concepts of fairness and justice" (Xi 2015a), indicating a new wave of activism in Chinese foreign policy.

However, China's ascendance in global governance is not an inevitable outcome of its ambition. Earlier studies find that despite its meteoric economic rise, China's role in global governance has been quite limited. An important factor has been the weakness of its civil society (see, for example, Wang and French 2013). In its original conception, global governance — unlike international regimes — emphasizes the role of non-state actors (Czempiel and Rosenau 1992). But the way in which Chinese leaders speak of global governance betrays an almost exclusive focus on state actors. In its pursuit of a greater say and more influence in the world,

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China has strengthened its presence at various international institutions, such as the World Bank, the International Monetary Fund and the Group of Twenty (G20), and increased its financial and personnel contribution to many intergovernmental initiatives, such as regional and plurilateral currency pools and UN peacekeeping forces. In contrast, the involvement of Chinese NGOs in global governance mechanisms has been minimal.

This policy brief focuses on the involvement in global governance of another type of non-state actors in China — industrial actors. Our preliminary study indicates this group of actors occupies a middle ground: they are not as active as the Chinese government on the world stage, but have shown greater desire and capacity in global rule making than Chinese NGOs. For example, the number of Chinese business organizations involved in the UN Global Compact — a worldwide network of companies and other stakeholders for sustainable development — has increased from 77 in 2012 to 195 in 2018. Meanwhile, since 2012, 18 Chinese financial organizations have joined the Principles for Responsible Investment, an initiative launched in 2006 by then UN Secretary-General Kofi Annan. However, there are clear differences among Chinese industrial actors. The divergent attitude of several prominent industrial actors toward participating in global governance is examined to illustrate the unevenness and complexity of the landscape. Some tentative explanations of the variation are then offered.

A Comparison of Industrial Actors

First, three influential Chinese state-owned enterprises (SOEs) in the resource sector are compared. China State Grid, China Sinopec Group and China National Petroleum, which are, respectively, the top second, third and fourth companies on the 2018 Fortune Global 500 list. So far, only China State Grid has shown an obvious interest in global rule making.

Liu Zhenya, president of China State Grid from 2004 to 2016, actively promoted the concept of "global energy interconnection (GEI)" when he was in office. He advocated an interconnected global power grid, beginning with a pan-Asian grid by around 2030 and then connecting to Europe and other parts of the world by 2050 (Reuters 2016). Following his retirement, he founded Global Energy Interconnection Development and Cooperation Organization (GEIDCO). This is the first transnational organization launched by Chinese actors in the field of global energy governance. GEIDCO's proclaimed mission is to "promote the establishment of a GEI system to meet the global demand for electricity in a clean and green way," and "establish a leading international organization and realize global energy interconnection."[1]

GEIDCO has worked hard to create a GEI technical standards framework. It has been a major force behind a recent white paper on global energy interconnection issued by the GEI project. The white paper argues that large-scale deployment of clean energy supported by an ultra-high voltage (UHV) grid backbone involves an unprecedented degree of system integration. This, in turn, requires consensus-based international standards and specifications: "Standards, specifically those at the systems level, will facilitate procurement and national and international acceptance and will play a stabilizing role by pursuing research activities on which real market opportunities are built" (IEC 2016, 3). It envisions four categories of standards. Systems standards facilitate the interactions between systems and the growing equipment assets in the areas of smart grid and smart energy. They ensure device and communication compatibility and provide interfaces for energy management systems. Management standards govern data sharing and provide guidelines for coordination in planning, scheduling, operation and control in the GEI. Standards for information exchange are to serve the control, protection and scheduling for GEI as well as cyber security. Standards for new materials and equipment aim to set guidelines for the engineering of new energy-conducting materials and for the development of reliable transmission of renewable energy to new areas in the world.

GEIDCO has played an active role in initiating and promoting its policy proposals in the International Electrotechnical Commission (IEC) as well as other related standardization organizations. The current president of China State Grid, Yinbiao Shu, was elected president of the IEC in October 2018. This is clearly a sign of the company's desire to gain greater influence in global rule making in this realm.

Second, two private industrial giants of e-commerce in China — Alibaba and Jingdong — are compared. Both companies provide huge platforms for businesses and consumers as well as growing financial services. Thus far, they have exhibited different attitudes toward global governance. Jingdong has shown little interest in global governance issues, except its recent bilateral collaboration with Google to explore the creation of next-generation retail infrastructure solutions (Laubscher 2018). By comparison, Alibaba Group has been much more actively engaged in global rule making.

In 2016, Jack Ma, founder and executive chairman of Alibaba Group, proposed the establishment of an Electronic World Trade Platform (eWTP), the goal of which is to reduce barriers and help small to medium-sized enterprises (SMEs) expand their trading capabilities worldwide (Alibaba Group 2016). The eWTP is described as a "private sector-led and multi-stakeholder initiative, for public-private dialogue to incubate eTrade rules and foster a more effective and efficient policy and business environment for cross border electronic trade (including both B2B and B2C) development."[2]

Aspiring to play an important role in global rule making in this realm, Ma has actively promoted his idea at various global governance fora. The B20 (business affiliate of the G20) endorsed the eWTP in its 2016 policy report, suggesting it "will promote public-private dialogue to improve the business environment and incubate future rules for cross-border e-Trade in some key areas" (B20 2016, 4). Moreover, this initiative was adopted in the G20 Leaders' Communique at the Hangzhou summit, which stated "we welcome the B20's interest to strengthen digital trade and other work and take note of its initiative on an Electronic World Trade Platform (eWTP)" (G20 2016).

It is interesting to note that the eWTP initiative is keen to cooperate with international organizations, such as the World Trade Organization (WTO) and the United Nations Industrial Development Organization (UNIDO). From Ma's perspective, the eWTP is not intended to supplant the WTO,

1 See www.geidco.org/html/qqnyhlwen/col2017080773/2017-09/26/20170926165053938781764_1.html.

2 See www.ewtp.org/about/introduction.html.

but rather to complement it by filling the gap in the existing global trade rules, which neglect SMEs in digital trade. WTO Director General Roberto Azevêdo recognizes the need for such an initiative, saying "one vital element will be to ensure that SMEs can access online commercial platforms… I welcome his [Jack Ma's] leadership on this front" (WTO 2016). The eWTP has formed a partnership with UNIDO to expand their collaboration. According to UNIDO's director general, Li Yong, "the eWTP initiative is very much in line with UNIDO's mandate of inclusive and sustainable industrial development and has the potential to contribute to the Sustainable Development Goals of the UN's 2030 Agenda for Sustainable Development." He expresses support of UNIDO's cooperation with eWTP in disseminating good practices and capacity-building e-commerce development for SMEs (EWTP, n.d.).

Third, the policy brief compares several leading Chinese companies in high-technology-driven industries, such as telecom, biotechnology and artificial intelligence (AI). So far, most of them have not shown an interest in playing a role in making global rules. For instance, BGI Group claims to be the largest provider of genome sequencing services in the world and is unquestionably the leader in China's genomics industry. However, it has played a limited role in the emerging global governance platforms, such as the Global Alliance for Genome and Health (GA4GH), an international, non-profit alliance created in 2013 with more than 500 members in 71 countries, which seeks to accelerate the potential of research and medicine to advance human health. According to a senior manager of the GA4GH, although BGI has applied to join in the alliance, it has not made any substantive engagement yet.[3] Similarly, Chinese AI companies have shown little interest in participating in industry-driven global governance institutions. For instance, none of them has been engaged in the Partnership of AI, an industry-oriented governance initiative established in 2016 and led by the world's largest technology companies. Although Baidu, China's search engine giant, reportedly became the first Chinese member of the Partnership of AI in late October 2018, its role in the partnership is not clear.

The exception is Huawei, a large telecom equipment and service company, which has been eager to take part in global rule making. However, in contrast to China State Grid and Alibaba, both of which have launched new global governance initiatives, Huawei has actively engaged in existing global rule-making platforms. One of these platforms is the 3rd Generation Partnership Project (3GPP), which incorporates seven telecommunications standard development organizations and brings their members together to produce the reports and specifications that define 3GPP technologies. The fifth generation (5G) of improved wireless systems and network technology is expected to replace the 4G mobile networks with enhanced mobile broadband, massive connectivity and ultra-high reliability and low latency. In the past three years, Huawei has worked alongside the world's other major telecom operators, chipset vendors and internet companies to develop a set of global 5G specifications, which was released in June 2018. Moreover, Huawei's proposal of Polar Code, a standard for short code programming aimed at better 5G coding infrastructure building and practices, was adopted as one part of the 5G standards. This is the first time that a Chinese company has successfully participated in standard setting in the field of basic communication protocol. Meanwhile, Huawei claims that it is still far from leading the 5G standards (Fang 2016).[4]

Sources of Variation

Why have some Chinese industrial actors become involved in global rule making, while others seem indifferent? This policy brief suggests three plausible sources of variation: whether the companies are at the innovation forefront of their industry on a global scale; whether they are eager to develop a strong international presence; and the qualities of their leaders.

First, the companies that have been active in participating in global standard setting are global innovation leaders in their respective industries. As pioneers in developing and applying new technologies for their products and services, some of their business activities are in areas without well-developed rules. This means they have an

3 Author interview with senior manager of GA4GH, Toronto, ON, September 24, 2018.

4 Recent US pressure on allies to ban Huawei from installing 5G equipment in their countries promises to hinder Huawei's role in this realm of global rule making, but Huawei is not giving up (Fildes and Kynge 2018).

opportunity for rule making. China State Grid, Alibaba and Huawei share this characteristic.

Compared with other resource-based Chinese SOEs, which do not have competitive technologies, China State Grid is a global leader in UHV grid. This innovation could be the backbone of its proposed GEI, serving to enhance long-distance transmission and optimal allocation of clean energy. Its technological lead gives China State Grid both the incentive to promote a UHV-based network of energy transmission and the capacity to lay down new rules in this area.

Similarly, Alibaba not only owns the most influential online retail platform, but also possesses the key technology of digital infrastructure for e-commerce. One of the affiliated companies in the Alibaba Group, Ant Financial Services Group (formerly known as Alipay), has advanced technological capabilities to solve problems in financial security, massive financial transactions and blockchain applications. For instance, its innovation on "paying with your face" was ranked one of the 10 breakthrough technologies by *MIT Technical Review* in 2017 (Knight 2017). With valuation of US$150 billion, Ant Financial is the highest-valued fintech company in the world and the world's most valuable unicorn company (*The Economist* 2017).

Likewise, Huawei has been globally competitive in innovation. It became the biggest filer of patents with the European Patent Office in 2017 and the first Chinese company to reach the number-one spot (Huawei 2018). Moreover, Huawei's research and development (R&D) budget, equal to 15 percent of sales, ranks it among the top R&D spenders in the world in 2017 (Lucas 2018). Being at the forefront of the global telecom industry, Huawei has been interested in and capable of shaping the important rules of the game, notably the 5G standards as discussed above.

A second common feature among companies seeking a role in global rule making is their eagerness to establish a strong international presence, which largely results from their imperative to expand sales to the global market. China State Grid, Alibaba and Huawei have all gained large shares of the domestic market and find it necessary to explore overseas markets for further development. It is in their interest to set global rules that suit their preferences and models of operation.

For instance, as one of two oligopolistic suppliers of electrical power in the country (the other being China Southern Power Grid), China State Grid serves more than 1.1 billion people, covering 88 percent of national territory. With no unexploited market space domestically, the company has to go abroad to explore new markets for development. Moreover, the well-established extra-high voltage (EHV) network is sufficient to satisfy its domestic clients in the current stage, so the domestic demand for UHV technology, which carries two times the voltage of EHV, is limited in China. Meanwhile, UHV technology is more suitable for long-distance transmission across countries and continents than EHV technology. In recent years, China State Grid has participated in operating the backbone energy grids in Brazil, Portugal, Australia, Italy, the Philippines and Hong Kong. By 2015, its overseas assets reached US$29.8 billion, 17 times that of 2009 (China Power 2015).

Similarly, Alibaba accounts for 58.2 percent of domestic retail e-commerce sales in China (McNair 2018). Its Alipay payment app accounted for 54 percent of China's US$5.5 trillion mobile payment market in the fourth quarter of 2017 (*The Economist* 2017). Further expansion in the domestic market will be difficult.

In China's smartphone market, competition between different companies is fierce. Huawei has had the largest market share for a while with 27.2 percent in the second quarter of 2018. It also has the second-largest share in the global market with 15.8 percent.[5] It will be more fruitful for the company to explore new markets overseas than within China. According to Yu Chengdong, vice president of Huawei, the goal of Huawei in the future is to occupy more than 40 percent of the domestic market and more than 30 percent of the global market (Liu 2018).

Third, Chinese industrial giants actively involved in global rule making are led by powerful and aggressive — even dictatorial — leaders, who hold complete authority in their companies. These individuals have the ambition to be industry leaders on a global scale, and they think about long-term global challenges for the whole industry. Their vision sets their companies apart from others led by people focused on managing the business and making short-term economic calculations.

5 See www.idc.com/promo/smartphone-market-share/vendor.

Table 1: Main Factors Affecting Companies' Approach to Global Rule Making

		Global Leadership in Industry	Search for Global Market	Strong Leader
Resource-sector SOEs	China State Grid	✓	✓	✓
	China Sinopec Group	×	✓	×
	China National Petroleum	×	✓	×
E-commerce private companies	Alibaba Group	✓	✓	✓
	Jindong Group	×	×	✓
Companies in emerging technology-led industries	Huawei (in telecommunication)	✓	✓	✓
	BGI (in biotechnology)	✓	×	✓/×
	Baidu (in AI)	✓	×	✓/×

Source: Authors.

At China State Grid, Liu Zhenya — the former president — was once the kingpin in the Chinese electrical power system. The staff at GEIDCO and China State Grid report that the proposal of UHV and GEIDCO were both initiated by Liu.[6] Although his proposals have been criticized by many Chinese scholars and experts, Liu's confidence or determination has never been shaken. He has had researchers within the State Grid system develop a series of research projects to refute the criticisms of his proposals.

Jack Ma is the undisputed boss of his business empire. As the founder of Alibaba, Ma has veto power over the strategy and direction of Alibaba. Moreover, evidence shows that the idea of eWTP was mostly initiated in his own name, instead of Alibaba Group. He proposed eWTP personally as chairman of the B20 SME Development Task Force in 2016. Since then, he has travelled around the world to lobby government leaders to promote eWTP. He has visited the heads of government of Australia, Belgium, Canada, France, Germany, Israel, Malaysia, Mexico, Russia, Thailand and the United States (*China Daily* 2018). Ma has recently announced the plan to visit three African countries every year, and plans to visit all 54 countries in Africa in the next 10 to 15 years (Malinz 2018).

Ren Zhengfei, founder of Huawei, is also a very strong leader. His ambition is to make Huawei an industry leader in the world. Unlike many Chinese industrial leaders, who see public listing of their companies as a quick way to raise capital and gain wealth, Ren has refused to list Huawei. In his opinion, shareholders always look for short-term financial returns, paying no attention to long-term goals. Instead, he insists on increasing the investment in R&D to develop Huawei's core technology (Zhao et al. 2016).

Table 1 summarizes the main factors underlying the different attitudes toward global rule making exhibited by the Chinese companies examined here. Although it is beyond the scope of this policy brief to explain why most Chinese industrial giants still lack interest in participating in global rule making, it appears that they do not possess at least one of the three characteristics discussed in this section.

First, in contrast with China State Grid, neither China Sinopec Group nor China National Petroleum has been led by leaders who stayed in office for a long term. Compared with Liu Zhenya, who served as the president of China State Grid for 12 years (2004–2016), the chair of China Sinopec Group has changed six times since 2000. Moreover, three of its six chairs are in prison because of corruption. The situation at China National Petroleum is similar. Its chair has changed four times since 2000. The high turnover has prevented the emergence of strong leaders at these two companies.

Second, unlike Alibaba, which owns leading technologies in global e-commerce and has had a strategy in exploring global markets for many years,

6 Author's telephone interview with senior manager of GEIDCO, October 17, 2018.

Jingdong did not begin to look to globalize until 2014, after the announcement of its public listing. It only set up an overseas business exploration department in 2017 (Bai 2017). The president of the company, Liu Qiangdong, has recently announced that Jingdong dreams of becoming a globalized company driven by technology and innovation in 10 years (Guan 2018). However, that remains a dream for the time being. Moreover, at the 2018 World Economic Forum in Davos, Liu mentioned that "his strategy of globalization includes two steps. The first step is introducing foreign brands into Chinese market, and the next step is to introduce Chinese brands into foreign market" (Yang and An 2018). This indicates that exploring the global market is not the company's current priority.

Third, compared with Huawei, which faces fierce competition in the domestic market, industry leaders in biotechnology and AI, such as BGI and Baidu, are under much less pressure to expand sales to the global market. In fact, in recent years, BGI has shifted its priority from international scientific research and services to domestic clinical sequencing services. This is not surprising because the market potential for its clinical service is huge in China. According to one research report, the scale of the Chinese sequencing market has increased by 32.3 percent, 44.1 percent and 64.8 percent in 2014, 2015 and 2016, respectively. Its market scale in 2016 was 8 billion renminbi (RMB), and is expected to reach 30 billion RMB in 2022. Moreover, the potential domestic market scale in the long term is expected to exceed 100 billion RMB (Qianzhan Industry Research Institute 2018). The situation in the field of AI is similar. The potential of the Chinese domestic market in AI-related products and services is tremendous. According to a report published by Tsinghua University, the domestic market scale of AI-related products was 23.7 billion RMB in 2017 and is expected to increase four times by 2020 to more than 90 billion RMB (China Institute for Science and Technology Policy at Tsinghua University 2018). With this background, most Chinese AI companies, including Baidu, are primarily focused on exploiting the domestic market instead of the international market.

Implications and Policy Recommendations

What does the participation of Chinese industrial actors mean for global governance? A common fear expressed by many outside observers of China is that Chinese companies, in particular SOEs, are closely tied to the Chinese government and are instruments used by the party-state to achieve its own political and strategic objectives. Although the concept of China, Inc. has its merits, it is not always accurate.

When Chinese companies seek a role in global rule making, their initiatives are undoubtedly acceptable to the Chinese government. However, that does not imply that the Chinese government twists the arms of industry actors to engage in these initiatives nor does it mean these initiatives necessarily serve the interest of the Chinese state. As shown above, the involvement of Chinese industrial actors in global rule making is highly uneven, reflecting the idiosyncratic characters of company leaders and different business strategies. There is no sign of a coherent national strategy coordinated by the Chinese government.

To the extent Chinese industrial giants have close ties with the Chinese government, it is not as exceptional as some might think. Multinational corporations based in Western countries also often align themselves with the policies of their home governments and seek government support in international affairs. What may be very different about Chinese companies is that they not only lobby the government for assistance, but are also eager to seek public recognition and support from the government. While companies in more market-based economies may avoid being seen as working too closely with the government, Chinese companies tend to be the opposite because of the continued state dominance in all aspects of Chinese society and the tradition of strict state control of foreign affairs.[7] In such a context, Chinese industrial actors are keen to use government support to increase their political capital and legitimacy.

7 Chinese premier, Zhou Enlai, famously stated in the early years of the People's Republic that "there is no small matter in foreign affairs" (外事无小事), which has been a foundational principle in the Chinese government's strict control of all interactions with foreign entities and individuals.

In the case of GEIDCO, the proposal was first announced by President Xi at the 2015 UN Development Summit (Xi 2015b). However, there is ample evidence that GEIDCO is a business-led rather than a government-led initiative. On its official website, GEIDCO describes itself as an organization "among willing firms, associations, institutions and individuals who are dedicated to promoting the sustainable development of energy worldwide." It consists of non-governmental agencies from China as well as other countries. It is rather a professional international non-government organization (INGO). According to a senior manager of GEIDCO, "although GEIDCO was firstly introduced by President Xi during 2015 UN Development Summit, the idea was developed by Liu Zhenya several years earlier. Indeed, Liu had published a 400-page book entitled *Global Energy Interconnection* (Liu 2015) in early 2015."[8] The senior manager also points out that "financially GEIDCO is totally supported by China State Grid instead of government agencies, and the staff at GEIDCO are all from China State Grid, too. Moreover, all efforts in promoting the proposal to the world are conducted by Liu Zhenya and the staff of GEIDCO, not by the government."[9]

The situation of the eWTP is more explicit. No Chinese government leaders have ever promoted the proposal publicly. According to the official eWTP fact sheet, "the vision for the eWTP is that it will be driven by businesses, with support from governments. Businesses can create hubs for e-commerce and governments can create virtual free trade zones for small businesses" (Alibaba Group 2016).

Thus, the role of Chinese companies in global rule making is more complex than just following the party-state. The authors' study suggests that Chinese companies decide how much to participate in global governance largely on the basis of their business interests as defined by their leaders — in ways not so different from business actors elsewhere. The special Chinese characteristic, which is rooted in the Chinese context, is that they are particularly eager to gain the public support of their home government.

As noted earlier, China's participation in global governance has been rising, but is heavily state-focused. The Chinese government has become quite active on the world stage, but non-state actors lag far behind. Chinese officials have just begun to show some awareness of the importance of involving industrial actors in global standard making. In November 2017, the Chinese government issued a guidance document encouraging non-state-owned companies to play a bigger role in improving China's manufacturing capabilities. As part of the overall effort for industrial upgrading, it calls for enterprises to participate in international standard making (Xinhua 2017). This policy brief has provided a preliminary analysis of the limited involvement of Chinese industrial actors in global rule making.

As latecomers in making global standards, Chinese industrial actors have a lot to learn. For those companies already involved in global rule making or aspiring to do so, it is crucial to stay focused on their technical capacities in addressing global challenges. They need to balance their traditional reliance on their close ties with the home government and the imperative to gain greater trust from businesses, regulators, NGOs and other stakeholders from other parts of the world. The latter is an essential condition for them to play a bigger role in global rule making in their respective industries.

To those concerned about China's role in global governance, this policy brief suggests keeping an open mind about Chinese companies. Although many of them obviously have connections with the Chinese government, they are not necessarily policy instruments of the Chinese government. While their participation in global rule making will likely avoid any outcome sharply contradicting China's national interest as defined by the Chinese government, that in itself does not exclude the development of fair and effective global governance rules. For instance, the value of GEI promoted by GEIDCO is recognized by global leaders. UN Secretary-General António Guterres says the GEI is significant "to promote world energy transition, and realize the 2030 development goals, such as sustainable energy for all" (GEIDCO 2017). Similarly, Fatih Birol, the executive director of the International Energy Agency suggests that "the electric power will dominate the future. Building large-scale power transmission infrastructure is the key to solve problems relating to future energy supply. Thus, it is needed to tap the potential of global power grid interconnection" (ibid.). Business actors and other stakeholders have much to gain from working with their Chinese counterparts in addressing common issues of global governance.

8 Author's telephone interview with senior manager of GEIDCO, October 17, 2018.

9 Ibid.

Acronyms and Abbreviations

3GPP	3rd Generation Partnership Project
AI	artificial intelligence
EHV	extra-high voltage
eWTP	Electronic World Trade Platform
G20	Group of Twenty
GA4GH	Global Alliance for Genome and Health
GEI	global energy interconnection
GEIDCO	Global Energy Interconnection Development and Cooperation Organization
IEC	International Electrotechnical Commission
INGO	international non-government organization
NGOs	non-governmental organizations
R&D	research and development
RMB	renminbi
SMEs	small to medium-sized enterprises
SOEs	state-owned enterprises
UHV	ultra-high voltage
UNIDO	United Nations Industrial Development Organization
WTO	World Trade Organization

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