Invitation Letter
CSPE Environmental Technology & Facility Committee

On March 15, 2018, the MEE released the “Environmental Access Conditions for WtE Project (Trial)”, requiring waste incineration plants to establish mechanisms and platforms for good interaction and regular communication with the surrounding public, communicate with daily communication channels. Guide to build YIMBY type waste incineration plant.

On June 24, 2018, the "Opinions of the CPC Central Committee and the State Council on Strengthening Ecological Environment Protection and Resolutely Fighting Pollution Prevention and Control" will achieve full coverage of all municipal and county municipal solid waste treatment capacity by 2020. Promote the utilization of waste resources and develop waste incineration power generation vigorously .

On October 25, 2018, the MOF, SAT, MEE jointly issued the Notice on the Relevant Issues Concerning the Application of Environmentally Friendly Taxable Pollutants, the wte plants established legally does not need to pay the ep tax,in case of the emission of taxable pollutants does not exceed the national and local emission standards.

On December 7, 2018, the MEE issued an expedited Notice on the Implementation of Electronic Supervisory Controls for Automatic Monitoring of Flue Gas Emissions from WtE Plants.MEE will supercharge the abnormal electronic supervision of the wte plants.All localities should urge waste incineration plants to actively mark the open and automatic monitoring of anomalies in the incineration system.Focus on supervising problems. For the waste incineration plants with automatic daily average value exceeding 10% in November 2018, please supervise the local people's government to supervise the organization, organize waste incineration plants to investigate the reasons for exceeding the standard, formulate and implement corrective measures.

On December 25, 2018, the National Energy Administration issued Announcement No. 16 of 2018, which approved 204 industry standards and released them. The second batch of three power industries proposed and organized by the China Power Enterprise Association Waste-to-Energy Standardization Technical Committee
Standard "Technical Specifications for Monitoring Systems for Waste-to-Energy Plants" (DL/T 1937-2018), Technical Specifications for Slag Treatment of Waste-to-Energy Plants (DL/T1938-2018), Technical Specifications for Leachate Treatment in Waste-to-Energy Power Plants (DL/ T 1939-2018), will be formally implemented on May 1st 2019.

China is a big country in the production of food waste, certainly it is related to China's population base.Meanwhile, with the rapid growth of China's economy, the acceleration of urbanization and general improvement of people's living standards, people's demand for food quality is also increasing,people's requirements for food have changed from the previous "satisfaction" to "eat well",this has also led to an increase in the amount of food waste generated in China.The retail sales of the catering industry grow at a rate of 21% per year, and the food waste will also roll as a snowball.From 2008 to 2015, China's catering industry revenue increased by 486.282 billion rmb to 486.401 billion rmb.In 2015, the number of employees in China's catering industry reached 2.22 million at the end of the year, with a business area of 5,366,250 square meters. The rapid development of the catering industry has brought a lot of food waste.During the “12th Five-Year Plan” period, the amount of Chinese food waste generated was 40 million tons/year, about 100,000 tons/day.The national food waste production amount was about 91.1 million tons, and the daily average food waste production amount was 250,000 tons/day, the per capita daily output was 0.18kg in 2015.The amount of domestic msw in China was about 204 million tons. If we take 36% to 37% of the proportion of food waste, the clean up amount of food waste in China will be at least 74 million tons. generated amount was around 97 million tons in 2016,converted to 210,700 tons per day.According to statistics, the China's urban catering industry income in 2017 was about 3.96 trillion rmb. If the proportion of leftovers in a catering activity is between 1/4 and 1/3, the Chinese catering industry will have nearly one trillion rmb sales become "junk" each year.The proportion of Chinese food waste to msw is roughly from 37%-62%.Neanwhile, with the continuous improvement of the people's living standards in the country, the structure and quantity of mass catering will be more abundant, so we are convinced that this proportion will continue to climb.According to statistics, many developed cities produce more than 3,000 tons msw per day, of which food waste accounts for about 50% or more. The large amount of food waste also requires the Chinese food waste treatment industry have stronger disposal capacity.

In late January 2017, the NDRC issued the "Guide Catalogue for Key Products and Services for Strategic Emerging Industries" (2016 Edition), and included the research and development of related equipment and technology for the "useful and decentralized utilization of food wastes". One of the sub-categories of recycling industry.Specifically, it includes: pretreatment technology equipment, low energy consumption and high efficiency sterilization of food waste, efficient recycling of waste oil, anaerobic fermentation and biogas technology and equipment, aerobic fermentation and high-efficiency organic fertilizer soil improver manufacturing technology, food waste to biodiesel, organic fertilizer, biogas, industrial ethanol and other resource-based products and purification technology and equipment.It can be said that this is another development opportunity during the 13th Five-Year Plan period.
According to the preliminary draft of the “13th Five-Year Plan for the Construction of MSW Harmless Treatment Facilities”, the food waste can reach 120,000 tons during the “13th Five-Year Plan” period, calculated according to the processing capacity of about

60%, The ability to form 75,000 tons per day is formed by the end of 2020.As per the plan's goal, the daily processing capacity of Chinese food waste will increase by 1.5 to 3 times in the next five years.According to the investment operation cost forecast of the food waste treatment project,the overall market space of the food waste will reach 100-150 billion rmb during the “Thirteenth Five-Year Plan” period, Among them, the construction of the food waste collection and transportation system needs about 20 billion rmb (the transportation system includes waste containers, vehicles, including the connection between vehicles and waste containers), and the disposal and disposal engineering market needs about 500-100 billion rmb. The daily operation market is about 30 billion rmb, the construction of the regulatory system can form a market size of about 2 billion rmb.According to the calculation of the amount of 200,000 tons per day during the “Thirteenth Five-Year Plan” period, it is necessary to realize the full coverage of the food waste resource treatment, calculated according to the average ton investment of 600,000 rmb, and the investment scale for the construction of food waste facilities is 120 billion rmb. In addition to the collection and transportation system, local subsidies, and supervision system construction, the total amount of food waste treatment industry exceeded 170 billion rmb.

Sludge is a rising threat to China’s environment. China's environmental statistics yearbook data shows that China's industrial wastewater discharge remained around 20 billion tons/year in 2010-2017, and urban municipal wastewater discharge increased from 35.4 billion tons to around 60 billion tons.Assuming that the effective treatment rate of wastewater remains unchanged, it is estimated that the industrial wastewater treatment capacity will be 20 billion tons in 2020, and the urban municipal wastewater treatment capacity will be 62.6 billion tons.In terms of sewage sludge, about 10,000 tons of wastewater produces 50,000-80,000 tons of sludge.China produces between 30 million tons and 40 million tons of sewage sludge with a 80% of moisture content per year.China's sewage sludge production is expected to reach 60 million tons to 9000 tons by 2020.China's sewage sludge production was 35 million tons in 2015,year-on-year increase 16%. China's sewage sludge production reached 53.69 million tons by 2018,the annual compound growth rate of (2018-2022) will be 13.49%,it will reach 89.09 million tons in 2022.The national sludge treatment capacity was about 13 million tons in 2016,the national sludge treatment rate was only 33%, and 67% of the sludge was not treated harmlessly.

Chinese leaders are aware of the sludge mountains problem.

In 2012, the State Council issued the “12th Five-Year Plan for Urban Wastewater Treatment and Recycling Facilities Construction Planning”,the planning indicators for sludge treatment and disposal are proposed for the first time, the sludge disposal rate of municipalities, provincial capitals and cities with separate plans will reach 80%, other cities will reach 70%, and counties and key towns will reach 30%. by 2015.

On January 5, 2015, the MOF, the NDRC and the MOHURD issued the “Administrative Measures on the Collection and Use of Wastewater Treatment Fees” to provide provisions on the collection and use of wastewater treatment fees and the use management. The measure implemented as of March 1, 2015. It was clear that the sludge treatment cost is included in the cost of wastewater treatment.

On January 26, 2015, the NDRC, MOF and MOHURD jointly issued the “Notice on Formulating and Adjusting the Wastwater Treatment Charges and Other Issues”, clearly stating the urban wastewater treatment charges should be adjusted . To residents are not lower than 0.95 yuan per ton, non-residents are not less than 1.4 yuan before the end of 2016 in principle, the county towns and key towns should be adjusted to not less than 0.85 yuan per ton, non-residents should be no less than 1.2 yuan.The average wastewater treatment fee of 36 cities was only 087 yuan/ton in October 2015. The wastewater treatment fees in Guizhou, Heilongjiang and Liaoning were lower, and there was a large room for improvement from the standard.

On April 2, 2015, the State Council officially issued the “Water Pollution Prevention Action Plan”, which set clear requirements for sludge treatment.The "Water Pollution Prevention Action Plan" pointed out that the sludge produced by the water treatment facilities should be stabilized, harmless and resourced for disposal, and it is forbidden for substanard treated sludge into the cultivated land.Illegal sludge dumping sites will be banned.Existing sludge treatment facilities should be basically retrofitted to meet the standard before the end of 2017.The sludge treatment rate in the prefecture-level city and above should be reached more than 90% before the end of 2020.

On October 21, 2015, the Central Committee of the Communist Party of China and State Council issued the "Several Opinions on Promoting the Reform of the Price Mechanism", clearly stating: "To properly raise the wastewater charging standard, the urban wastewater treatment charging standard should not be lower than the wastewater and sludge treatment cost." With the country's emphasis on environmental protection,besides the implementation of sludge treatment fees, in terms of the sludge project subsidies, the sludge treatment projects have also issued subsidy policies to encourage sludge treatment projects building, and implement subsidies in a variety of ways to project investment throughout the country.

On February 26, 2016, the MEP and MOHURD jointly issued the “Notice on Strengthening the Verification of Wastewater Treatment and Disposal Sludge Treatment Facilitie'', the “Notice” made assessment for proper sludge treatment into the total wastewater discharge reduction. It proposed that “all localities should properly treat sludge into the unified supervision of urban wastewater

treatment discharge reduction for the first time. For various irregular sludge treatments, the chemical oxygen demand and ammonia nitrogen reduction of urban wastewater treatment corresponding to this part of sludge shall be deducted.And the specific calculation method and relatively strict punishment measures are clarified.

On November 15, 2016, the State Council executive meeting passed the “13th Five-Year Plan for Ecological Environmental Protection”. The planning goal will be further improved, and the sludge stabilization, harmless and resource treatment will be vigorously promoted. The treatment rate of sludge in the prefecture-level city and above will be 90%, and the Beijing-Tianjin-Hebei region will reach 95%.

In order to accelerate the sludge treatment, the central government will invest 200 billion rmb for the sewage sludge treatment of the wastewater treatment plant during the “Thirteenth Five-Year Plan” period. Under the continuous the sludge disposal technology breakthrough and the policy promotion, the sludge treatment industry entered the blue ocean market. With the guidance of the policy, the market demand for sludge treatment industry in China has been released. The “13th Five-Year Plan” will be the peak period for sludge treatment building.In a country struggling with pollution from massive quantities of untreated sludge and seeking new sources of clean energy, policymakers want to get more sludge-to-energy projects up and running soon.Hefei is putting together its first experiment converting municipal sludge into energy. Beijing has also rolled out a plan to tap into the energy potential of sludge, along with other cities such as Chengdu, Changsha, and Chongqing.Market opens up as China tackles wastewater sludge,sludge management in China is one of the largest emerging opportunities in the world.

Based on the previous 6 year’s successful events, to explore waste to energy industry ‘s future development strategy, exchange the domestic and international latest and most environmental friendly waste to energy technology, share the successful experience of domestic and international enterprises in waste to energy industry, hereby 7th Annual Asia Waste to Energy Congress 2019 will be scheduled on this 26th Jun - 28th Jun in Shen Zhen.

We sincerely invite you taking the time to attend the "7th Annual Asia Waste to Energy Congress 2019 ", share with us your views and suggestions concerning the waste to energy. We look forward to provide a platform for the entire waste to energy supply chain, promote the policy complement, business cooperation, networking the technology as well, make a contribution for the energy efficient environmental friendly waste to energy industry. Looking forward to your support and attendance !

Jan 18th 2019