



MCC CCEPC

中国五矿



— 专注环保 缔造绿色都市 —

WUHAN CITY ENVIRONMENT PROTECTION ENGINEERING LIMITED COMPANY  
中冶南方都市环保工程技术股份有限公司



中国五矿

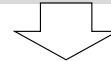


CCEPC

About Us  
公司简介

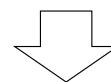
## 中国五矿集团公司 (CMC)

- Ranks 58th of the Global Fortune 500 Companies.
- 2022年《财富》世界500强第58位



## 中国冶金科工集团有限公司 (MCC)

- Ranks 290th of the Global Fortune 500 Companies.
- 2016年《财富》世界500强第290位



## 中冶南方 (WISDRI)

- Top 10 of National Survey & Design Enterprises 中国勘察设计院排名前10
- Founded in 1955 成立于1955年
- More than 5000 employees 正式员工超5000人



## 都市环保 (CCEPC)

- Founded in 2000 成立于2000年
- Registered capital: CNY 920 million 注册资本9.2亿元人民币
- Annual Turnover Approx. CNY 15 Billion 年新签合同额150亿元



MCC

CCEPC

中国五矿

Certificates &amp; Qualifications

资质和证书

- Engineering Qualification for EPC Project (Environment Projection)—Class A
- 环境工程（水污染防治、大气污染防治、固体废物处理处置）——专项甲级资质
- Engineering Qualification for EPC Project (Power construction, municipal, building)—Class A
- 火力发电（含核电站常规岛设计）——专业甲级资质
- Environmental Protection Project Contracting — Class A
- 环保工程专业承包——壹级施工资质

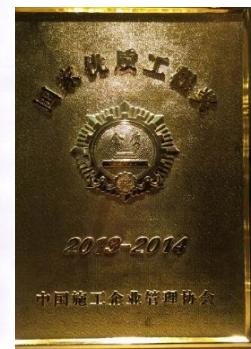
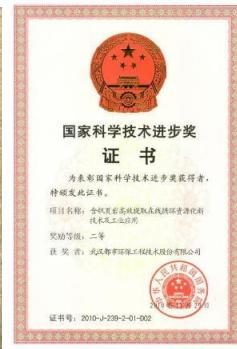




MCC CCEPC

Honor  
荣誉

中国五矿



- Vice-Chairman of China Environmental Protection Industry Association**
- 中国环境保护产业协会副会长单位
- China Top 10 Waste to Energy Design Institute**
- 中国十大垃圾焚烧发电设计院
- National Torch Program Hi-tech Enterprise**
- 国家火炬计划高新技术企业
- National Prize for Progress in Science and Technology**
- 国家科学进步奖



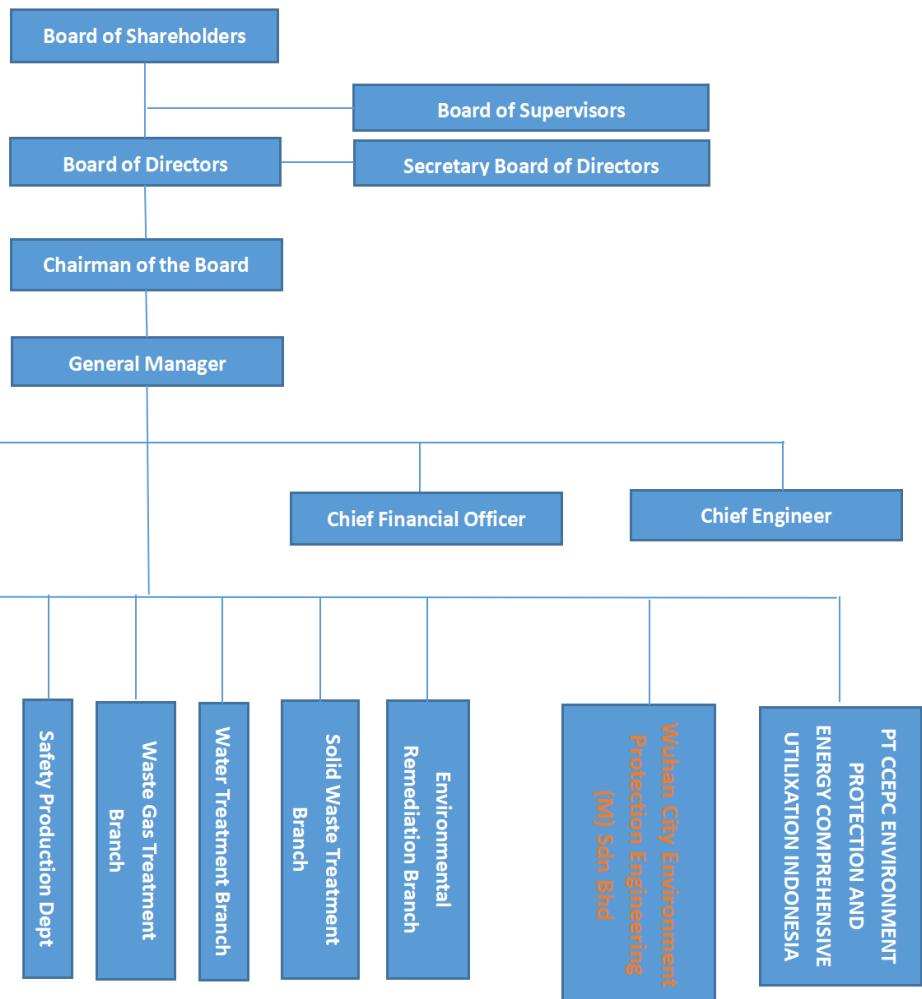
CCEPC

Corporate Structure

组织结构图

**Company Employees:** 1200+  
**Engineering:** 600+  
**Purchasing:** 100+  
**Project Management:** 200+

公司员工: 2000+人  
 专业设计人员: 600人  
 采购管理人员: 100人  
 项目管理人员: 200人





中国五矿



CCEPC

Main Business  
核心业务

- Integrated service provider: **Consultation, Investment, design, complete equipment supply, construction, O&M, etc.**
- 提供能源和环保项目的综合解决方案——咨询、投资、设计、成套供货、施工建设、运维管理等全流程服务。



Clean Energy

清洁高效发电



Solid Waste Treatment

固废处置



Waste Water Treatment

废水处理



Flue Gas Treatment

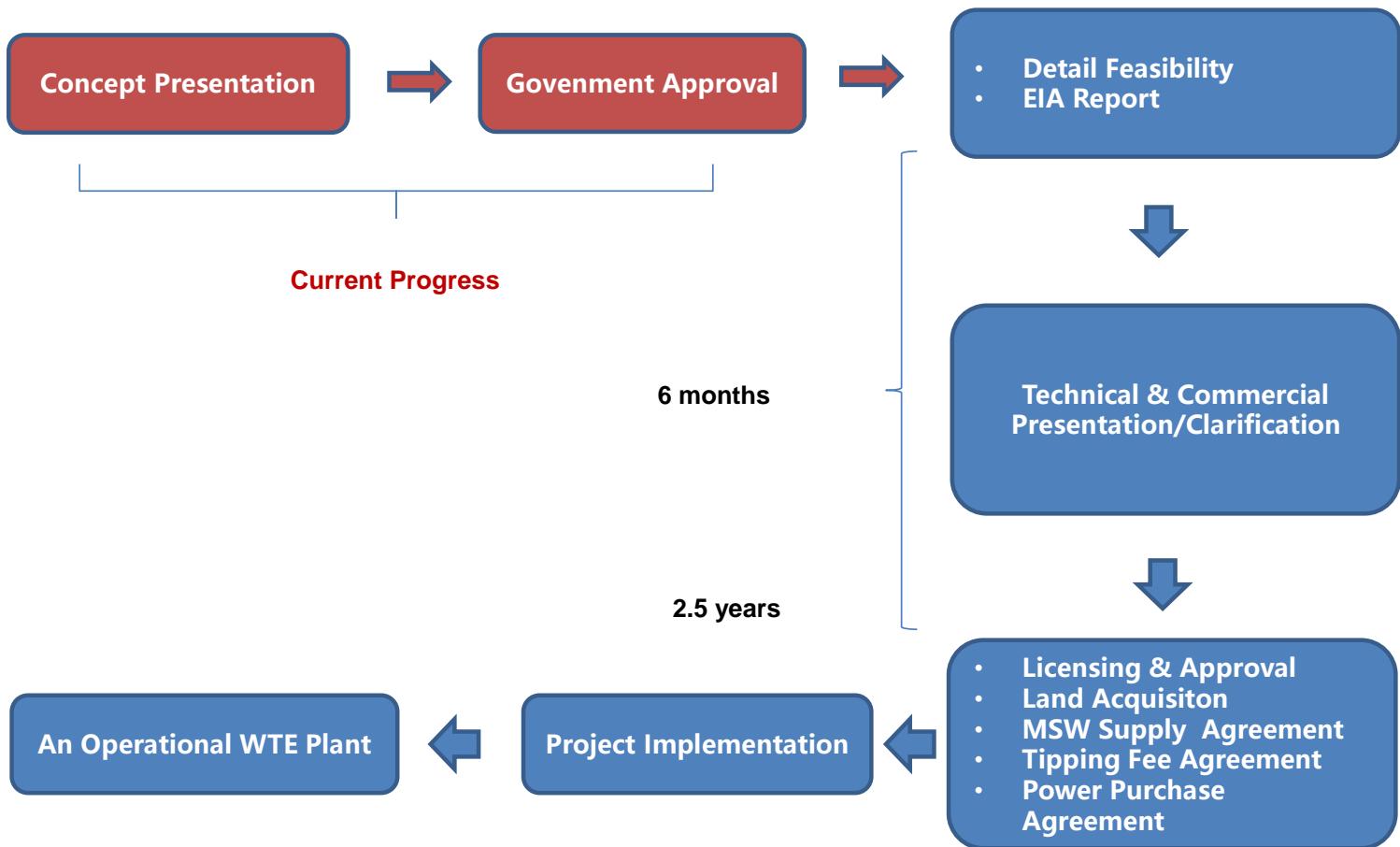
烟气治理



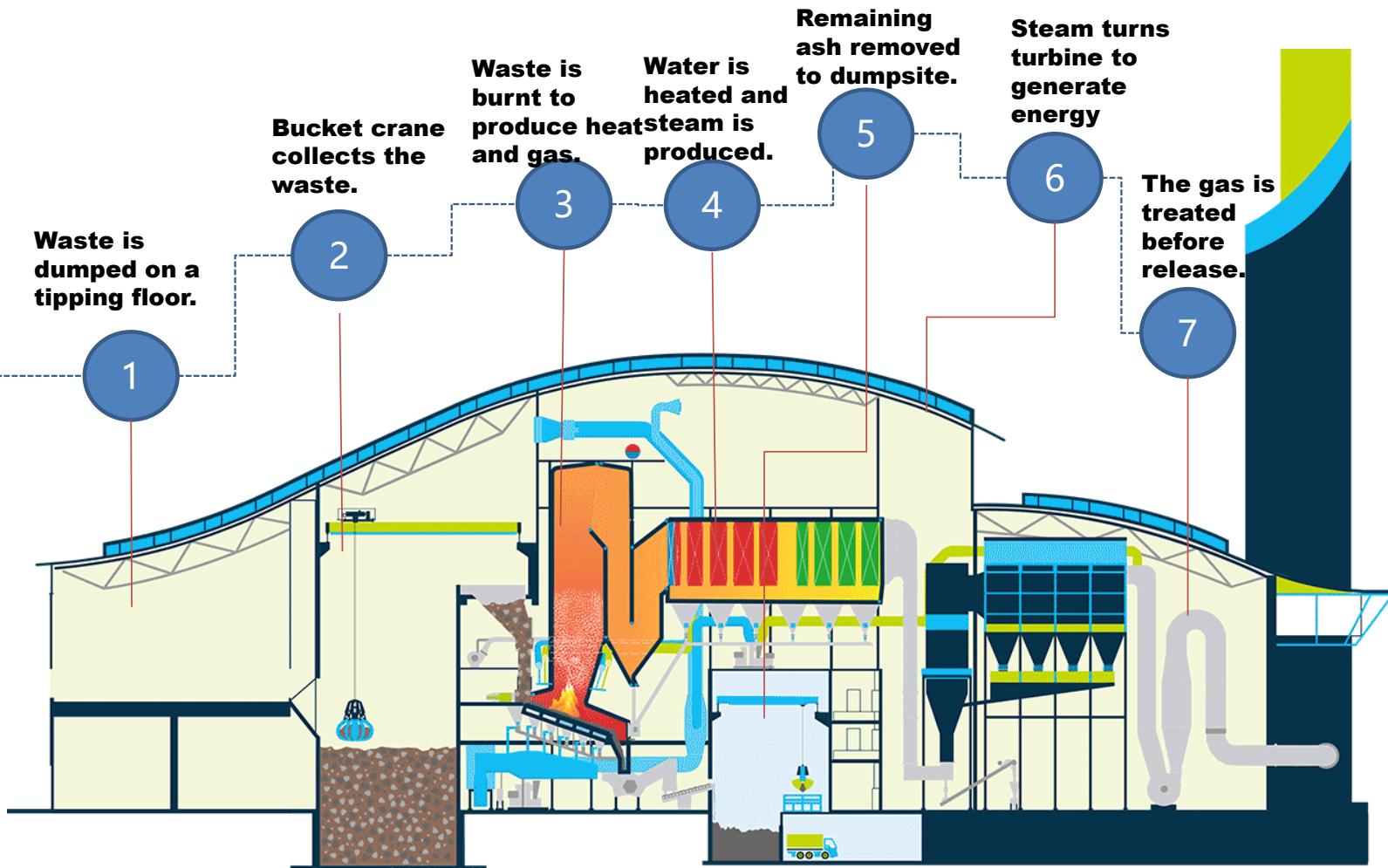
Environment Remediation

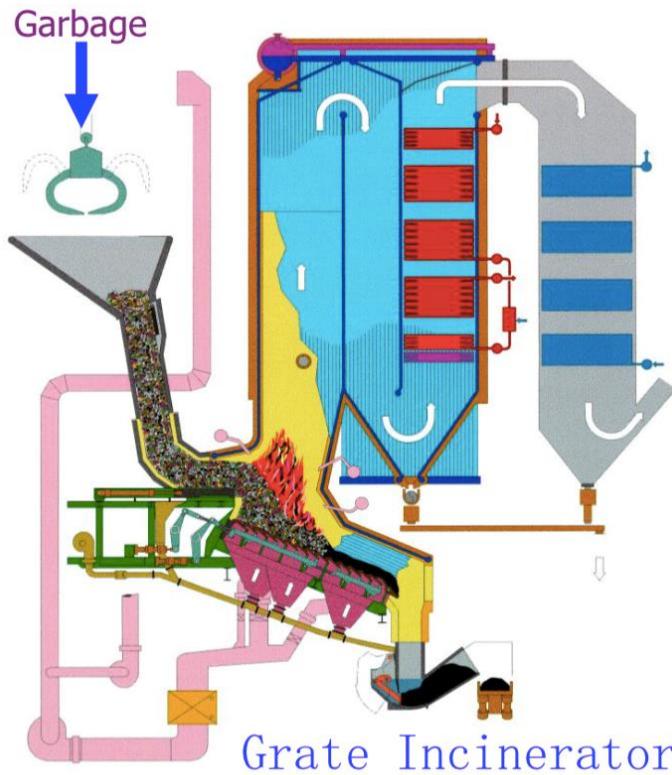
环境修复

## Implementation Plan



## Waste to Energy Process



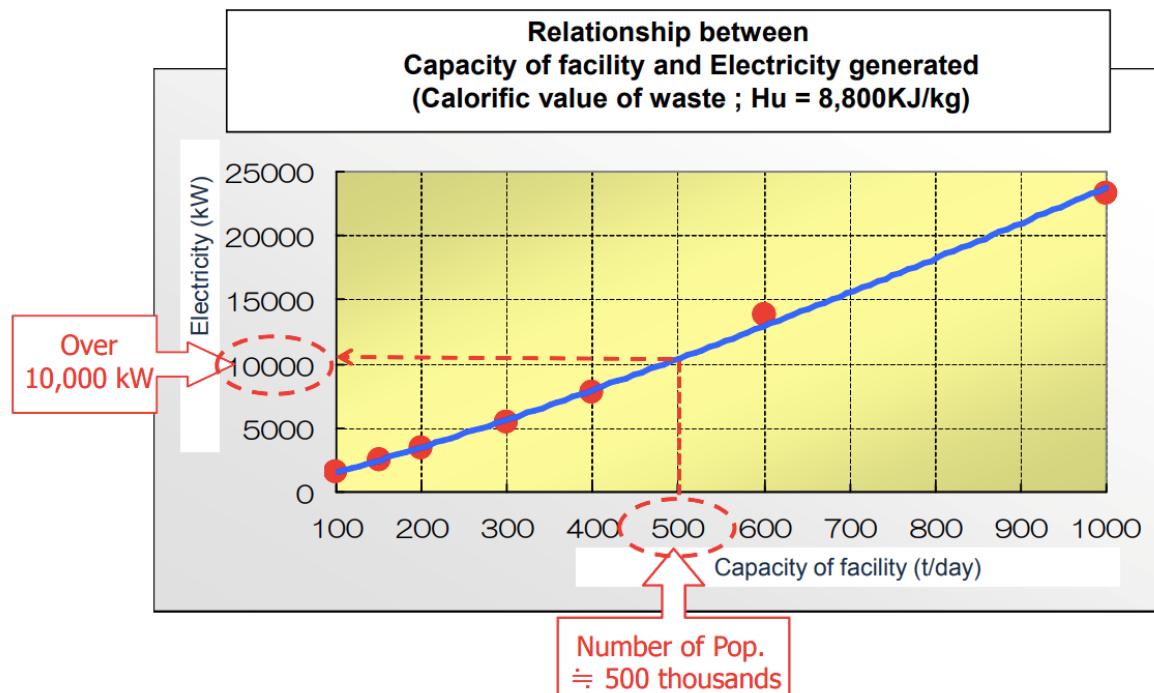


## Grate Incinerator Features

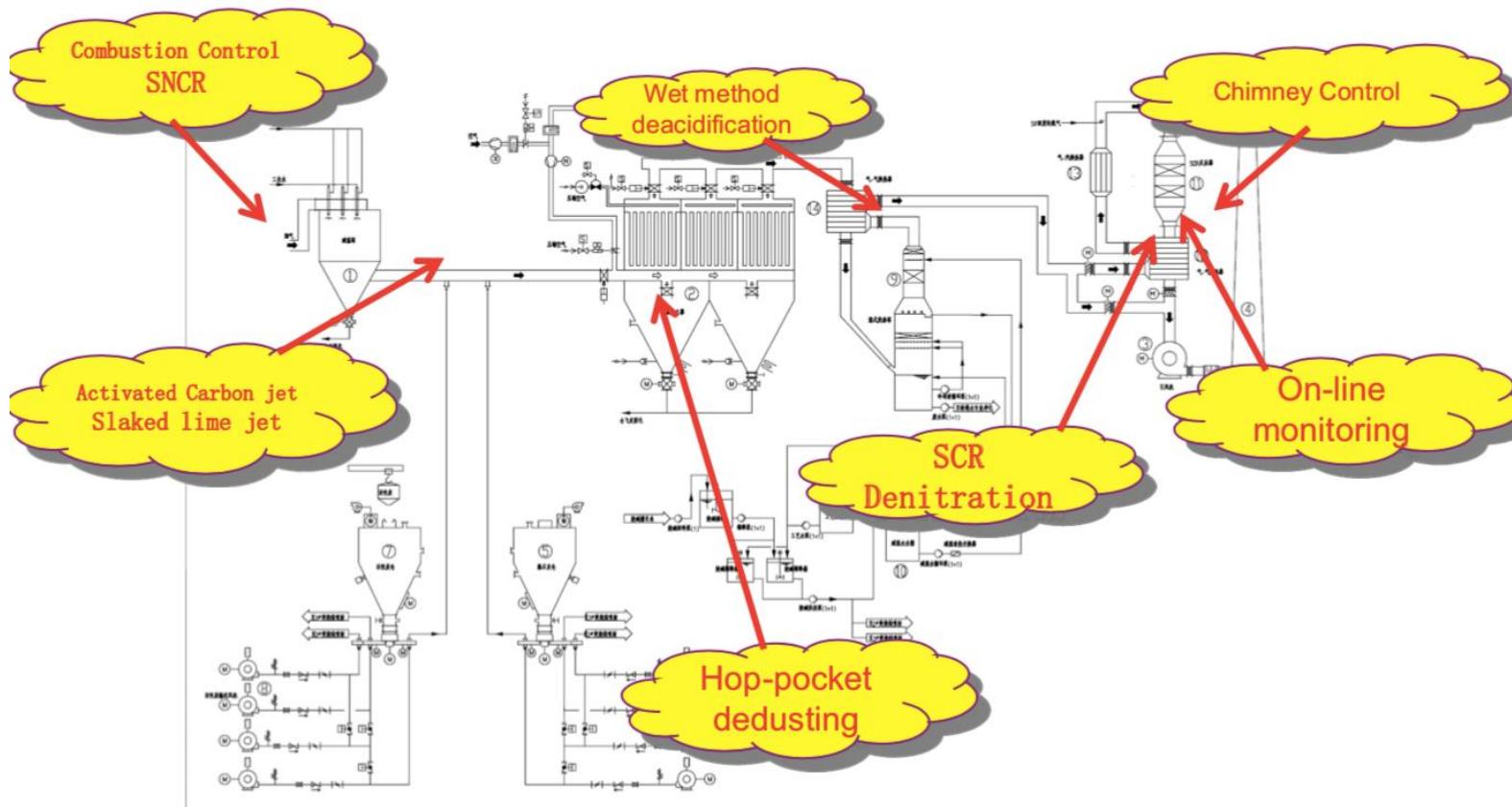
- No need prior MSW sorting or shredding.
- Accommodate large quantities and variations of composition and calorific value, especially for high moisture and low calorific value waste.
- Single unit capacity of 100~900t/d MSW
- Over 30 years of life as a whole with running time > 8000 hours/year
- Stable incineration with temperature 850°C~1200°C.
- Proven technology applied in more than 40 countries.

## High Efficiency Power Generation System

CCEPC utilizes a variety of technologies that maximize generating efficiency, for example by enabling waste heat boilers to generate higher-temperature, higher-pressure steam and by optimizing the design of steam turbines, to make possible highly efficient waste power generation.



## Flue Gas Treatment System





中国五矿



CCEPC

WASTE TO ENERGY PLANT

生活垃圾焚烧发电业务介绍

## Comparison with EU Emission Requirements

No.	Pollutant	Unit	China Emission Limit GB 18485-2014	EU Emission Limit 2010/75/EU	Average Value of WTE plant we built
1	Dust	mg/Nm <sup>3</sup>	20	10	5
2	HCL	mg/Nm <sup>3</sup>	50	10	8
3	HF	mg/Nm <sup>3</sup>	-	1	0.5
4	SO <sub>2</sub>	mg/Nm <sup>3</sup>	80	50	20
5	NOX	mg/Nm <sup>3</sup>	250	200	80
6	CO	mg/Nm <sup>3</sup>	80	50	20
7	TOC	mg/Nm <sup>3</sup>	-	10	5
8	Hg	mg/Nm <sup>3</sup>	0.05	0.05	0.02
9	Cd+T1	mg/Nm <sup>3</sup>	0.1	0.05	0.04
10	Pb, Cr and other heavy metal	mg/Nm <sup>3</sup>	1	0.5	0.3
11	Dioxin	ngTEQ/Nm <sup>3</sup>	0.1	0.1	0.05



中国五矿



CCEPC

WASTE TO ENERGY PLANT

生活垃圾焚烧发电业务介绍

## Our Performance



### Single Unit Capacity

- 300~1000t/d



### Plant Capacity

- 600~4250t/d



### Thermal Parameters

- Medium Temperature & Pressure (4.0MPa, 400°C)
- Medium Temperature & Sub-high pressure (6.5MPa, 450°C)



### Grate Type

- Keppel Seghers-KSBE
- Mitsubishi-Martin
- Denmark-Volund
- Hitachi-Vonroll
- Japan- Ebara
- Germany-Steinmueller Babcock
- Sanfeng-Sity2000



### Business Mode

- Planning
- Consulting
- Design
- Project Management
- EPC



### Industry Status

- Awarded "China Top10 Waste to Energy Designing Institute"
- 《Municipal Solid Waste Treatment Engineering》 -Chief Editorial Unit



中国五矿



CCEPC

WASTE TO ENERGY PLANT

生活垃圾焚烧发电业务介绍

## Our Performance



### Single Unit Capacity

- 300~1000t/d



### Plant Capacity

- 600~4250t/d



### Thermal Parameters

- Medium Temperature & Pressure (4.0MPa, 400°C)
- Medium Temperature & Sub-high pressure (6.5MPa, 450°C)



### Grate Type

- Keppel Seghers-KSBE
- Mitsubishi-Martin
- Denmark-Volund
- Hitachi-Vonroll
- Japan- Ebara
- Germany-Steinmueller Babcock
- Sanfeng-Sity2000



### Business Mode

- Planning
- Consulting
- Design
- Project Management
- EPC



### Industry Status

- Awarded "China Top10 Waste to Energy Designing Institute"
- 《Municipal Solid Waste Treatment Engineering》 -Chief Editorial Unit



中国五矿



CCEPC

WASTE TO ENERGY PLANT  
生活垃圾焚烧发电业务介绍

## Our Performance

### Likeng WTE Plant, Guangzhou, China

(Municipal Solid Waste, 1000t/d+22MW)



- 2×500t/d Grate Incinerator+22MW Power Generator
- Steam Parameter: **6.5MPa, 450°C**
- Flue Gas Pollutants Control:  
Combustion Control(3T+E) +SNCR+Semi-dry Scrubbing Tower+Acative Carbon Absorption+Bag house Filter+Online Monitor

Awarded:

- 2007 National Key Environment Protection Demonstrative
- Project 2009 Excellent Engineering & Design First Prize
- National AAA Engineering Prize



中国五矿



CCEPC

## Our Performance

### Baoan WTE Plant, 2nd Phase, Shenzhen, China, 3000TPD



- 4×750t/d Grate Incinerator +2×30MW Power Generator.
- 4.0MPa, 400°C
- Flue Gas Pollutants Control:

Combustion Control(3T+E) +SNCR+Semi-dry Scrubbing Tower+Acative Carbon Absorption+Bag house Filter+Online Monitor

#### Awarded:

- National High Quality Project Golden Prize (Only one in WTE Industry)
- Power Construction Excellent Engineering First Prize
- National Project Construction Excellent Design First Prize



MCC CCEPC

中国五矿

WASTE TO ENERGY PLANT  
生活垃圾焚烧发电业务介绍

## Our Performance

### Baoan WTE Plant, 3rd Phase, Shenzhen, China. 4250TPD



- 5×850t/d Grate Incinerator+3×45MW Power Generator.
- Flue gas Control: Combustion Control(3T+E) +SNCR+Semi-dry Tower+Acative Carbon Absorption+Bag house Filter+Online Monitor.
- Biggest WTE Plant in Asia



MCC CCEPC

中国五矿

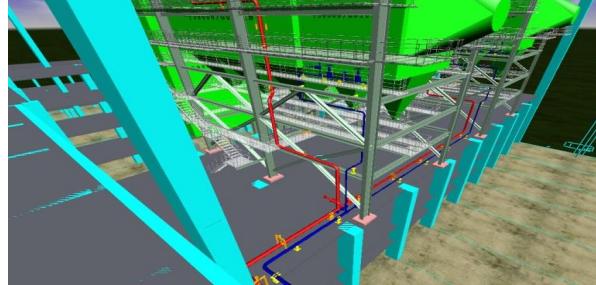
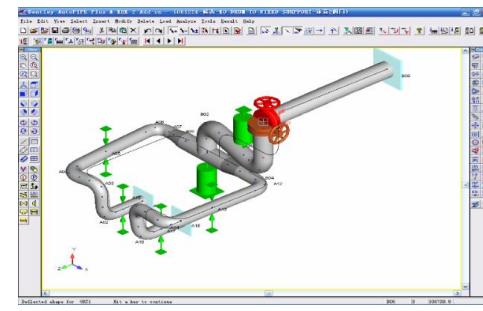
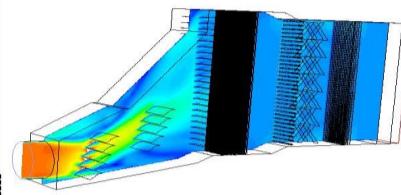
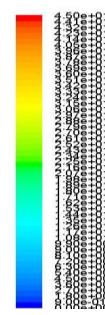
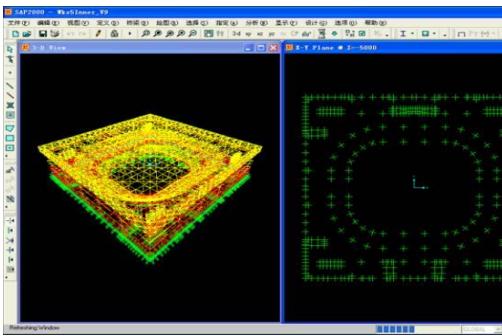
WASTE TO ENERGY PLANT  
生活垃圾焚烧发电业务介绍

## Our Performance





## Our Ability



**PDMS (3D Plant Design)**

**Bentley AutoPipe (Piping stress analysis)**

**Caesar II (Piping stress analysis)**

**ANSYS-Fluent (Flow Field Analysis and Design)**

**SAP 2000 (Structure Analysis and Design)**

.....

.....

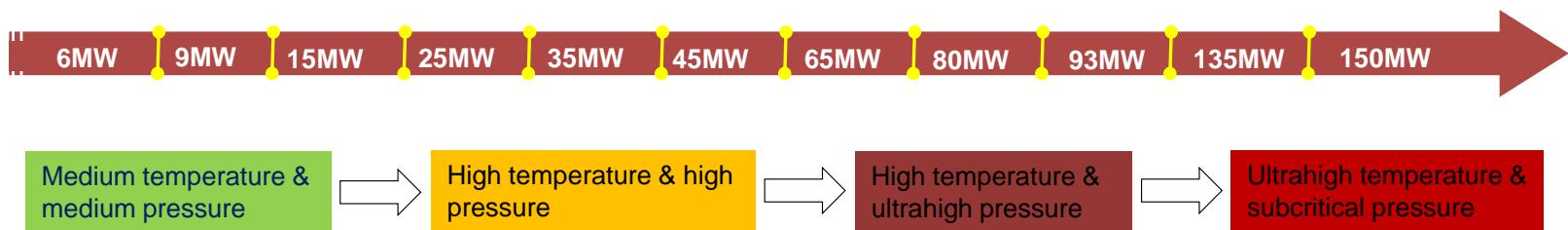


中国五矿

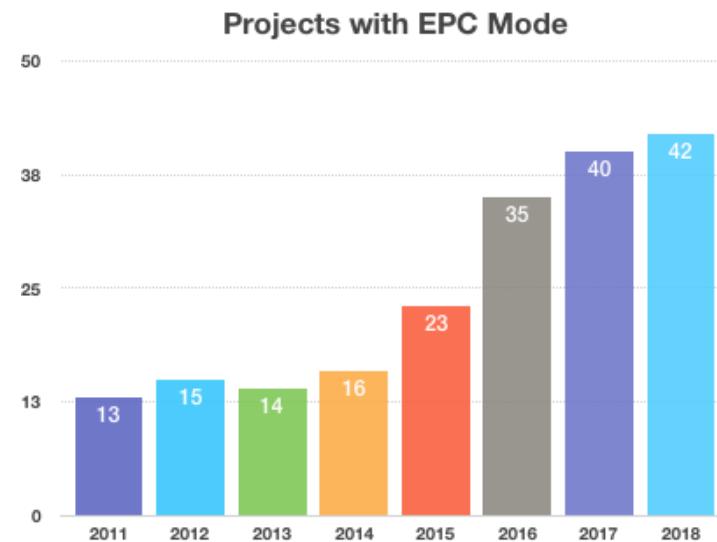


CCEPC

## Our Ability



- **CCEPC Focuses on Developing Medium and Small Scale Power Plant Below 150MW.**
- **Over 1000 Engineers of all aspects of WTE Technology .**
- **Over 200 Power Plant References.**

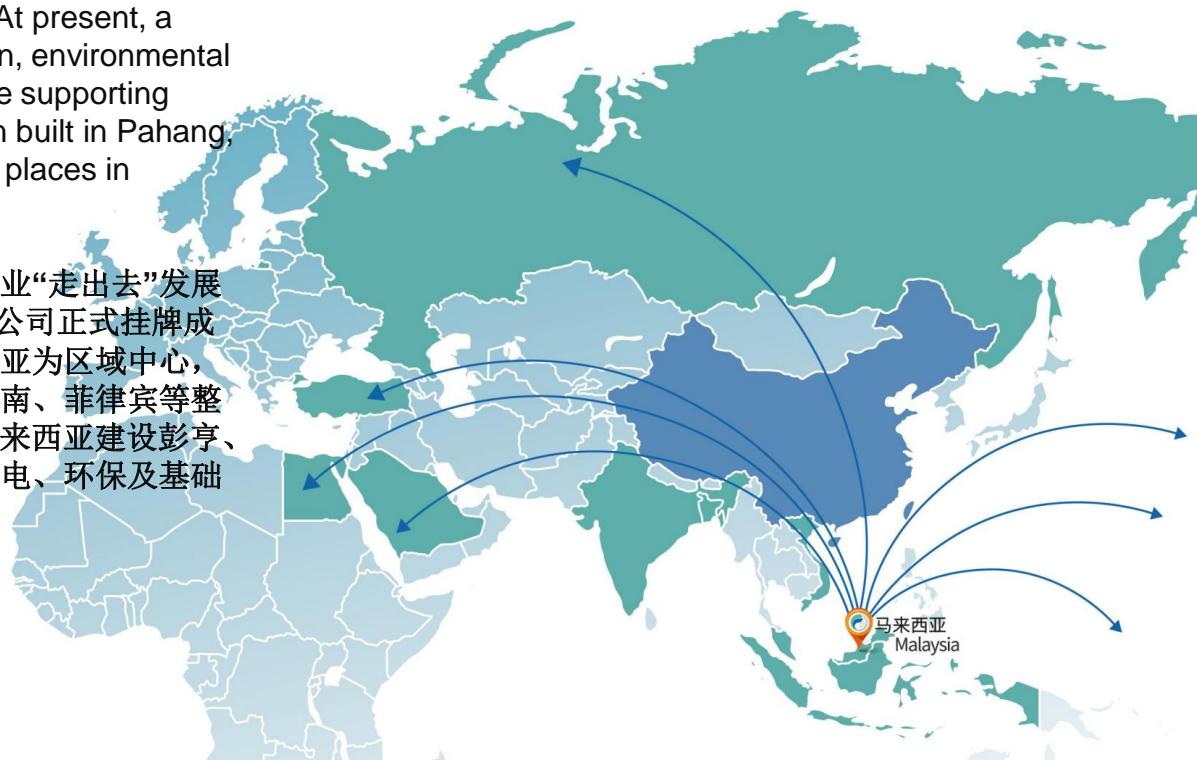


# Wuhan City Environment Protection Engineering(M) Sdn Bhd

In January 2017, CCEPC officially established a Malaysian company. with Malaysia as the regional center, and at the same time radiating business to Indonesia, Vietnam, the Philippines and other Southeast Asian markets . At present, a number of power generation, environmental protection and infrastructure supporting facilities projects have been built in Pahang, Kedah, Selangor and other places in Malaysia.

在国家“一带一路”和鼓励企业“走出去”发展战略引导下，2017年1月，公司正式挂牌成立马来西亚公司，以马来西亚为区域中心，同时将业务辐射至印尼、越南、菲律宾等整个东南亚市场。目前已在马来西亚建设彭亨、吉打、雪州等地建设多个发电、环保及基础配套设施项目。

都市环保（马来西亚）工程技术有限公司



# Registration and CIDB Certificate (G7)

## 公司注册及CIDB证书 (G7)



BORANG 9  
AKTA SYARIKAT 1965

No. Syarikat - MyCoID  
1215310 M

[Seksyen 16(4)]

**PERAKUAN PEMERBADANAN SYARIKAT SENDIRIAN**  
Dengan ini diperakui bahawa  
**WUHAN CITY ENVIRONMENT PROTECTION ENGINEERING (M) SDN. BHD.**  
telah diperbadankan di bawah Akta Syarikat 1965, pada dan mulai dari  
10 haribulan Januari 2017, dan bahawa syarikat ini adalah sebuah syarikat berhad  
menurut syer dan bahawa syarikat ini adalah sebuah syarikat sendirian.  
  
Dibuat di bawah tandatangan dan meterai saya di Kuala Lumpur  
pada 10 haribulan Januari 2017.

**DATO' ZAHRAH ABD WAHAB FENNER**  
PENDAFTAR SYARIKAT  
MALAYSIA

User ID : ahafrah Date : 10/01/2017 05:31:22 PM

NO. SIRI SSM 5658900



### PERAKUAN PENDAFTARAN

Adalah dengan ini diperakui bahawa kontraktor Asing yang dinyatakan di bawah ini telah berdaftar dengan Lembaga mengikut  
Bahagian VI Akta Lembaga Pembangunan Industri Pembinaan Malaysia 1994. Pendaftaran ini adalah terflikuk kepada syarat-syarat yang telah ditetapkan bersama perakuan ini.

No. Pendaftaran	:	0320230417-CN000004
Nama Kontraktor	:	WUHAN CITY ENVIRONMENT PROTECTION ENGINEERING (M) SDN. BHD.
Alamat Berdaftar	:	14A JALAN TUN MOHD FUADTAMAN TUN DR ISMAIL 60000 WILAYAH PERSEKUTUAN KUALA LUMPUR
Daerah	:	KUALA LUMPUR
Tarikh Mula Berdaftar	:	15/02/2017

GRED	KATEGORI	PENGKHUSUSAN
G7	B	B04
G7	CE	CE21
G7	ME	M15

Tarikh Mula Berkemaskuna : 17/04/2023  
Tarikh Habis Tempoh Perakuan : 16/04/2025  
STATUS: BARU



Ketua Eksekutif  
Lembaga Pembangunan Industri Pembinaan Malaysia  
Tarikh: 17/04/2023



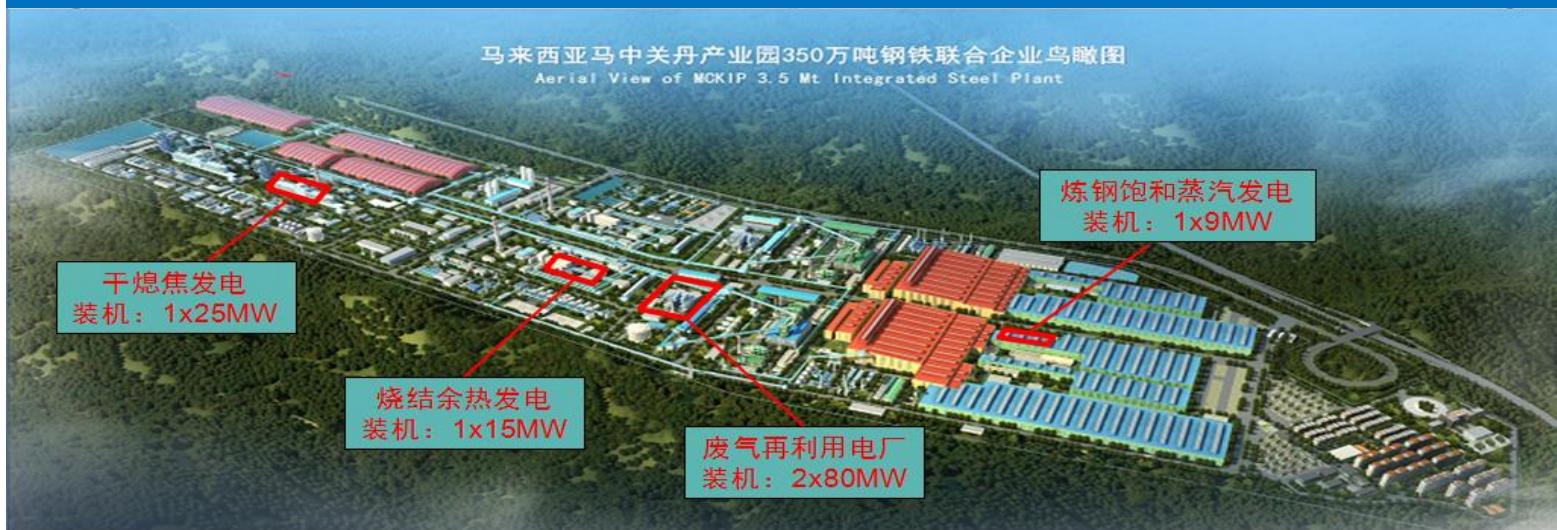
## Alliance Steel Power Generation System Full Process Service (Consulting +EPC+ O&M)

马来西亚联合钢铁全厂发电系统全流程管家服务

(咨询+EPC+运营)

全厂余热余能回收 (209MW)

- ✓ 废气再利用电厂 Waste Gas Reuse 2X80MW
- ✓ 干熄焦余热发电 CDQ Waste Heat Recovery 25MW
- ✓ 烧结余热发电 Sinter Waste Heat Recovery 15MW
- ✓ 炼钢饱和蒸汽发电 Saturated Steam Recycle 9MW



## Malaysia MCKIP Waste Gas Reuse Power Plant EPCC Project

马来西亚马中关丹产业园废气再利用电厂EPC总承包工程



**Scale:**  
2x80MW

**Location:**  
Kulim, Kedah, Malaysia

## Selangor Waste to Energy EPCC Project

雪兰莪州垃圾焚烧发电EPCC工程

**Scale:** 2X700tpd+2X750tpd, 30MW+35MW

**Location:** Jeram, Selangor, Malaysia



## Glass Kiln Waste Heat Recovery Power Plant in Kulim Kedah, Malaysia

金晶科技玻璃窑余热发电工程



**Scale:**

5MW

**Location:**

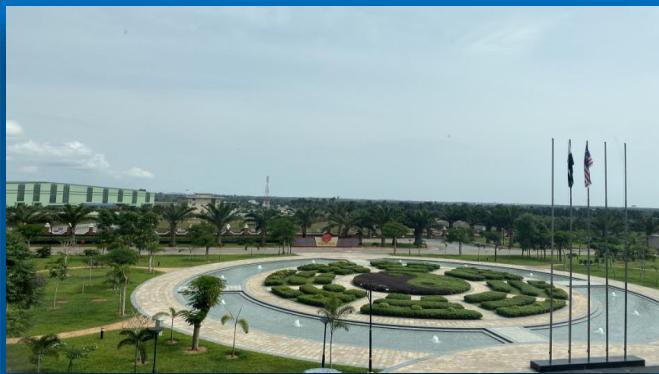
Kulim, Kedah, Malaysia



联合钢铁（大马）集团公司生产调度大楼  
地点：关丹，彭亨州  
Alliance Steel Production Command Center  
Location: Kuantan, Pahang



联合钢铁（大马）集团公司员工宿舍楼  
地点：关丹，彭亨州  
Alliance Steel Staff Dormitory Building  
Location: Kuantan, Pahang



联合钢铁（大马）集团公司园林景观工程  
地点：关丹，彭亨州  
Alliance Steel Landscape project  
Location: Kuantan, Pahang



联合钢铁（大马）集团公司35KV变电站项目  
地点：关丹，彭亨州  
Alliance Steel 35kv Substation  
Location: Kuantan, Pahang



**THANK YOU**

领先技术 创造优美环境

