



YOUR CLEANTECH PORTAL TO CONNECT CHINA

1. Industrial Waste Water Market IN CHINA
2. Soil Remediation Market in CHINA
3. Plan China Journey
4. CleanConnect 2019

UMORE

2019.9.19

UMORE's Proven Path for Cross Border Cooperation in Market Dev. and Financing



2014

Year Founded



400+

Oversea Companies Connected



25

Countries Connected



300+

CHINA Partnership Proposals
Generated through UMORE
Organized Activities



540M

Investment Term sheet Values Received with
UMORE FA service in 2017-2018



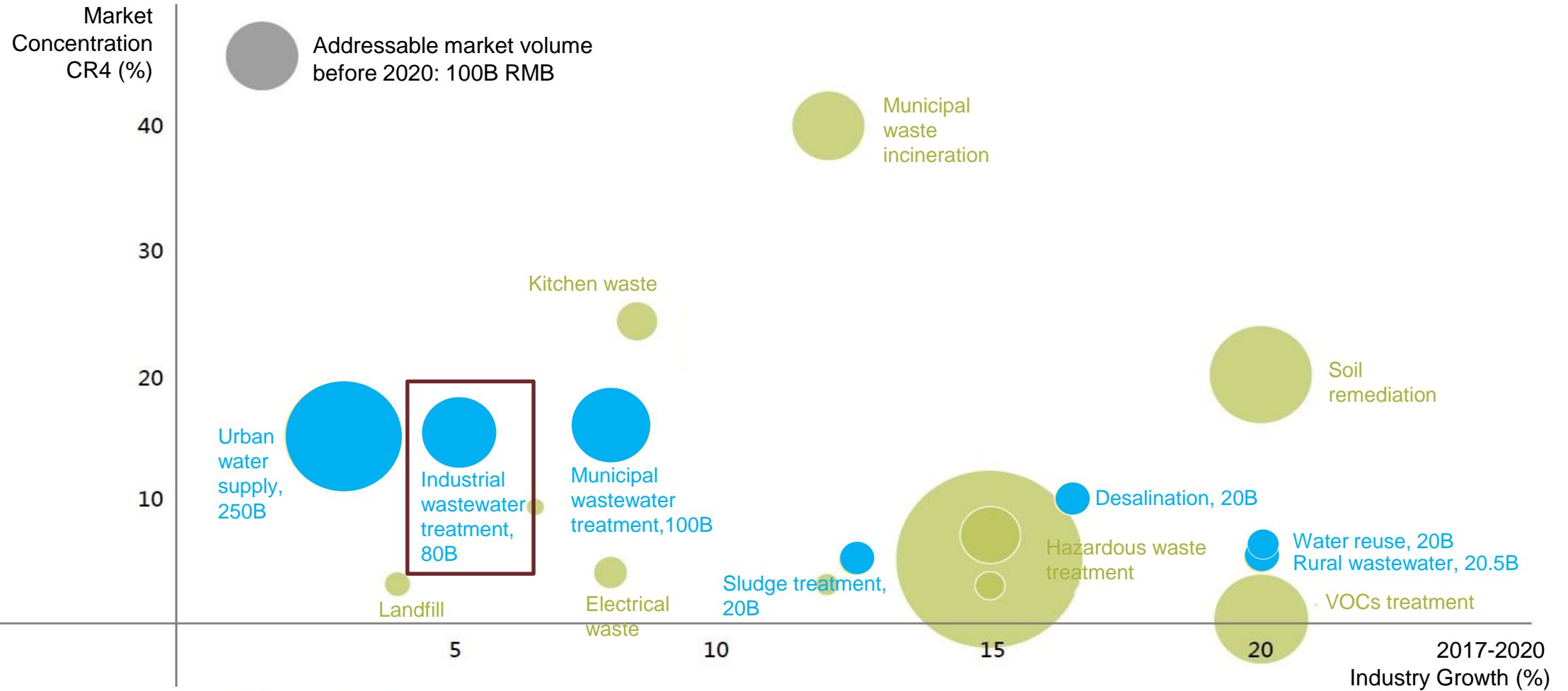
280M

RMB Transactions Closed in 2017-
2018

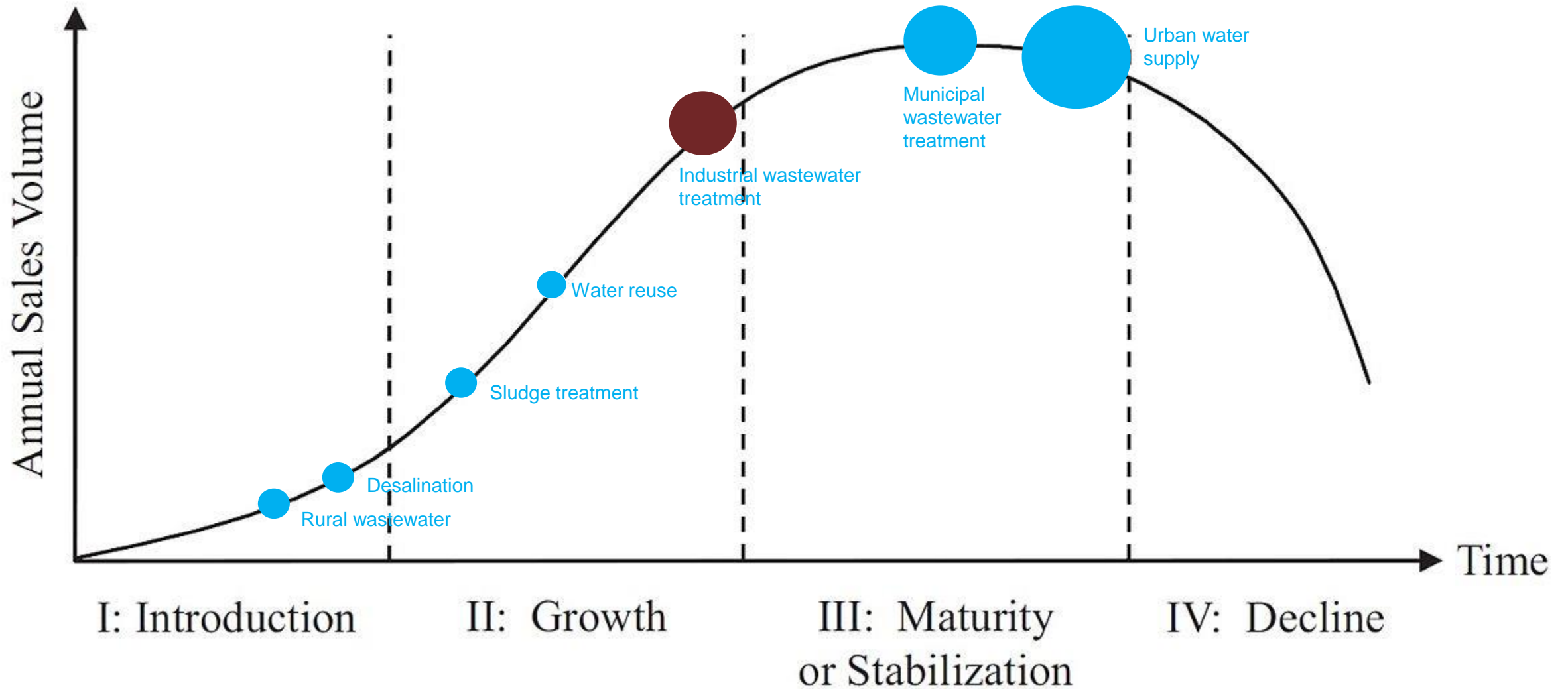


Industrial Wastewater Opportunities in China

A Macroview of Water-related Market Sectors in China



A Macro-view of Water-related Market Sectors in China



KEY Data about China Industrial Waste Water Treatment

105

105 IWW Treatment Enterprises

80_B

80B RMB Market Size

#2

USA is No.1 Market

1.6_{RMB}

AVR OPEX, 0.55~6.98RMB/T

15.97%

Revenue CAGR 2002-2017 for IWW

25%

Profit Margin is more than 25%

10_B

10 Billion M&A Foundation
(RMB)

Water Ten

Water Pollution Prevention
and Control Action Plan-2015.4.16

10 general measures
38 sub-measures with deadlines
238 specific actions involved



Market Volume

Created a 1.9 Trillion RMB market for the next 5 years

- 1.4 Trillion (US\$210.8B) in direct purchase of treatment products and services
- 500 Billion (US\$75.3B) indirect investment

Major Targets in 5 years:

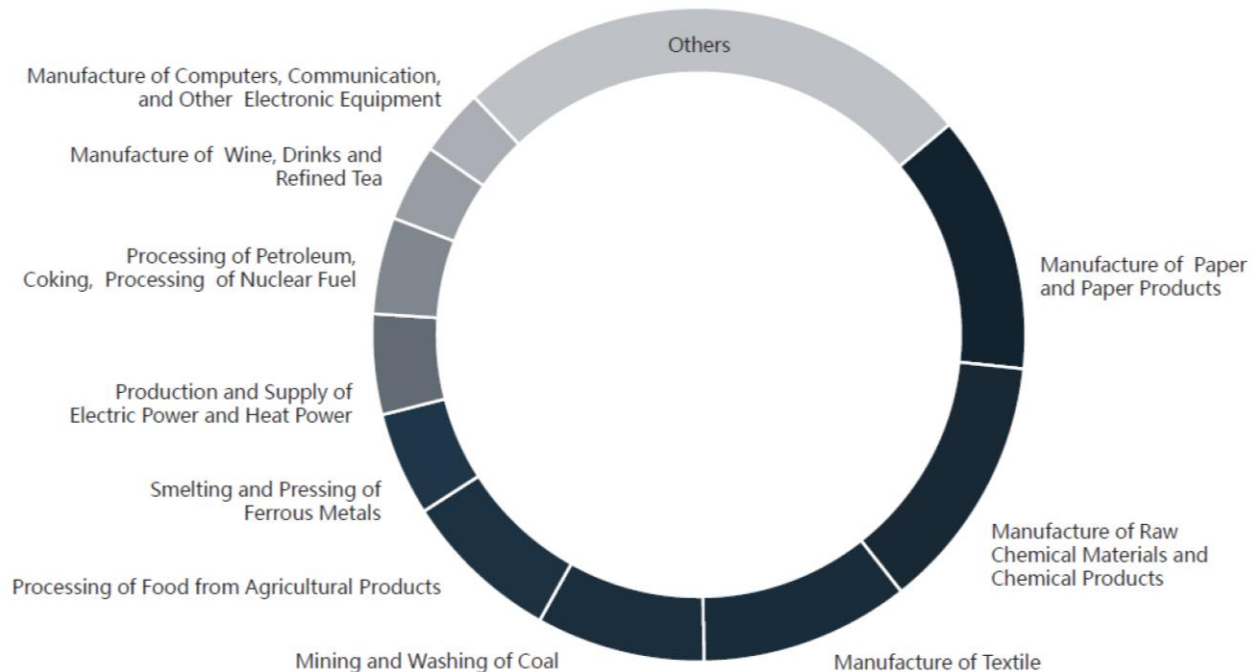
- By 2020, the quality of over **70%** of the water in seven key river basins will reach level III or above ;
- By 2020, the amount of foul water in urban built-up areas will be controlled, thus not exceeding 10 percent.
- To reduce groundwater over extraction and control groundwater pollution – groundwater falling under “very bad” category shall decrease to around 15% by 2020.

Main market sectors:

- Black odorous river/pond (smelly river) treatment
- Decentralized sewage treatment in rural areas
- Tertiary treatment and water reuse in municipal wastewater treatment plant
- Industrial water recycle and reuse
- Industrial wastewater treatment

Industrial Wastewater Treatment

Sources of industrial wastewater



Key notes:

- Top 5 sectors account for 52% of the discharge at ~32M ton per day.
- Decreases in discharge quantity by 13.6% from 2012 to 2015, and likely to continue at 2% y/y.
- Third party BOO is a popular business model due to frequent regulation change, currently at 20% and expect to grow to 40%.

Overseas Technology demand on:

- ✓ Advanced oxidation processes
- ✓ High salinity wastewater treatment
- ✓ Water reuse & ZLD
- ✓ Hazardous wastewater
- ✓ Heavy metals removal & recycling
- ✓ In-line monitoring
- ✓ Clean Production Process

High Salinity Industrial Wastewater



Chemical



Coking



Refinery



Pharma

0

Relationship Driven

Build Infrastructure, almost Completed

1

Solution Driven

Facilities Retrofit, most in Process

2

- System Setup and in Operational
- Higher requirement for branding and track record
- Low Profitability with bigger project size
- Requirement of partnership building for Oversea

- Clear Goal Set for treatment
- Higher requirement for Solution Capability
- Higher Profitability with smaller project size
- More transparency and independent opportunities for Oversea

Short of system design to maintain sustainable discharge requirement with scalable solutions

Industrial Park Market

中国石油化工基地及化工园区分布图



45% Industrial WW from the Park
PERFORMANCE is a start
PRETREATMENT is important
PARTNERSHIP is enabler

- More Industrial End Users are moved into centralized management system. Industrial Park has become a high demand customer for higher requirement of solutions
- The park has dual demand: Good Industry introduction and Good Quality Maintenance where the overseas companies could play dual roles also
- Required to partner strategically with local company for industrial park development for effective Customer Management plus Solution provide.

Types of Companies in IWW



EPC/OM model Mainly → BOO/BOT model MORE

Chinese SME Companies Portfolios List

NAME	REGION	NICHE MARKET	TOTAL ASSETS	ASSET-LIABILITY RATIO
Xiangyunfeilong Recycling	Dali	Resource recycling	8550	43.0%
Jingjin Evir.	Dezhou	Sludge treatment	2510	40.7%
Longfu Recycling Energy	Xinyang	Resource recycling	1620	76.5%
Thunip	Beijing	Municipal sewage treatment	1600	60.9%
Zeho Waterfront Eco.	Beijing	Water remediation		
Aerospace Kaitian Envir.	Changsha	Industrial flue gas treatment	1500	73.0%
Meng-Shui Water	Huhehaote	Municipal sewage treatment	1320	79.9%
Xi'An Huajiang Envir.	Xian	Industrial dust treatment	1270	72.0%
Jiangxi JDL Envir.	Nanchang	Industrial waste water treatment	990	36.2%
Dechang Envir.	Wenzhou	Domestic waste treatment	990	64.4%
Lingzhi Envir.	Wuxi	Municipal sewage treatment	960	51.5%
Zhejiang Judong	Taizhou	Resource recycling	880	63.1%
Atk Holding	Wuxi	Industrial waste water treatment	820	58.1%
Bioland Envir	Zhengzhou	Industrial waste water treatment	780	59.8%
Ier Envir.	Shenzhen	Municipal sewage treatment	780	67.8%
Reculture Renewable	Xiamen	Resource recycling	770	59.8%
Herrel Envir.	Chengdu	Domestic waste treatment	760	45.7%
Hunan Modern Envir.	Changsha	Domestic waste treatment	720	51.1%
Puretown Envir.	Kunming	Municipal sewage treatment	720	33.5%
Shanshui Envir.	Beijing	Water remediation	670	60.4%
Shifang Envir.	Jinan	Restaurant Garbage Treatment	650	46.3%
Guangdong Xindayu Envir.	Guangzhou	Industrial waste water treatment	580	46.5%
Shanghai Senon	Shanghai	Industrial waste water treatment	580	51.9%
Jiehua Holdings	Haining	Industrial blue gas treatment	570	53.5%
Hunan Vary Tech.	Changsha	Resource recycling	560	44.9%
Henan Bccy Envir.	Zhengzhou	Industrial waste treatment	550	36.7%
Zhejiang Tianlan Envir.	Hangzhou	Industrial flue gas treatment	550	69.3%
Cnhomeland Envir.	Guangzhou	Industrial waste water treatment	520	66.3%
Huaxin Envir.	Beijing	Resource recycling	520	40.9%
Shazc Group	Shanghai	Noise control	500	63.5%

NAME	REGION	NICHE MARKET	NET PROFIT	NET MARGIN
Jiangxi JDL Envir.	Nanchang	Industrial waste water treatment	222.40	44.1%
Jingjin Evir.	Dezhou	Municipal sewage treatment	142.61	9.0%
China Union Engin.	Xiamen	Industrial waste water treatment	106.83	34.6%
Zeho Waterfront Eco.	Beijing	Water remediation	78.20	13.9%
Shazc Group	Shanghai	Noise control	65.79	19.8%
Bgt International Envir.	beijing	Industrial waste water treatment	65.47	15.6%
Eit Envir.	Shenzhen	Garbage cleaning / transportation	64.55	5.8%
Xiangyunfeilong Recycling	Dali	Resource recycling	63.03	3.3%
Lingzhi Envir.	Yixing	Municipal sewage treatment	62.63	18.2%
Beijing Zhtd Envir.	Beijing	Industrial flue gas treatment	59.89	26.2%
Xi'An Huajiang Envir.	Xian	Industrial dust treatment	54.19	9.6%
Herrel Envir.	Chengdu	Municipal sewage treatment	47.41	43.6%
Juyue Water Envir.	Changzhou	Industrial waste water treatment	45.33	13.7%
SND H&H Envir.	Suzhou	Industrial waste water treatment	44.83	68.2%
Aerospace Kaitian Envir.	Changsha	Industrial flue gas treatment	40.57	4.9%
Meng-Shui Water	Huhehaote	Municipal sewage treatment	39.99	6.2%
Thunip	Beijing	Municipal sewage treatment	35.72	3.2%
Longfu Recycling Energy	Xinyang	Resource recycling	35.33	4.4%
Songyang Recycle Resources	Shantou	Resource recycling	35.21	10.8%
Dechang Envir.	Wenzhou	Domestic waste treatment	35.05	13.5%
Bioland Envir	Zhengzhou	Industrial waste water treatment	33.68	17.4%
Anhui Tongyuan Envir.	Hefei	Sludge treatment	33.61	10.4%
Sinogreen	Taiyuan	Environmental monitoring	32.78	27.0%
Zhejiang Judong	Taizhou	Resource recycling	31.73	1.5%
Shanghai Senon	Shanghai	Industrial waste water treatment	31.71	9.5%
Shanshui Envir.	Beijing	Water remediation	31.05	9.6%
Wuhan FUND Envir.	Wuhan	Municipal sewage treatment	30.85	32.7%
Jiangsu Zhaosheng Envir.	Yixing	Municipal sewage treatment	30.38	12.4%
Gehope Envir.	Shanghai	Industrial flue gas treatment	30.32	37.9%
Tongjie Waters	Beijing	Municipal sewage treatment	30.14	17.1%

Cases in Industrial Waste Water with China



Korean Company
Owned US Water
Treatment Corp.

**100% M&A
(\$7.52M)**

1. Prepare Teaser - China Investor
2. NDA signed with Potential Investor
3. IM Review and VDR link shared
4. LOI Received
5. Due Diligence
6. Financing Check
7. SPA Negotiated
8. Timetable set and SPA signed
9. Acquired by Safbon in Shanghai



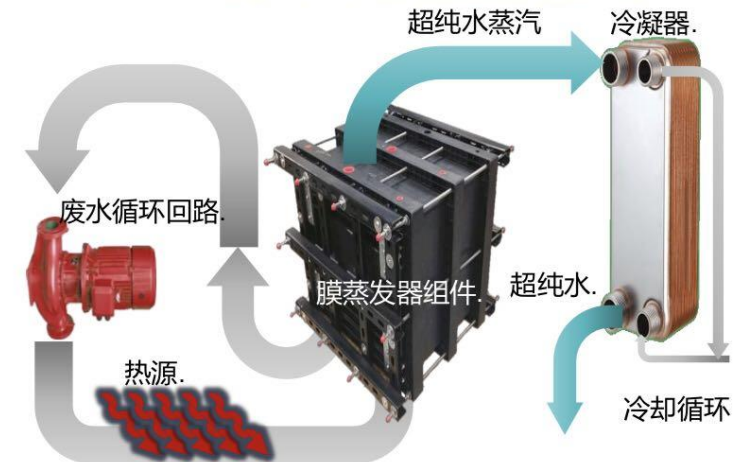
US Company
In Industrial WW
Treatment

Pilot Projects

1. Product Teaser
2. NDA signed with Potential Partner
3. Product Review and Pilot Opp.
4. Pilot Site visit and Proposal
5. Financing Model and Payment Model
6. Pilot Agreement Negotiated
7. Procurement
8. Setup and Performance Track



NanoClear™：基于Aqualyte的高难度废水处理神器



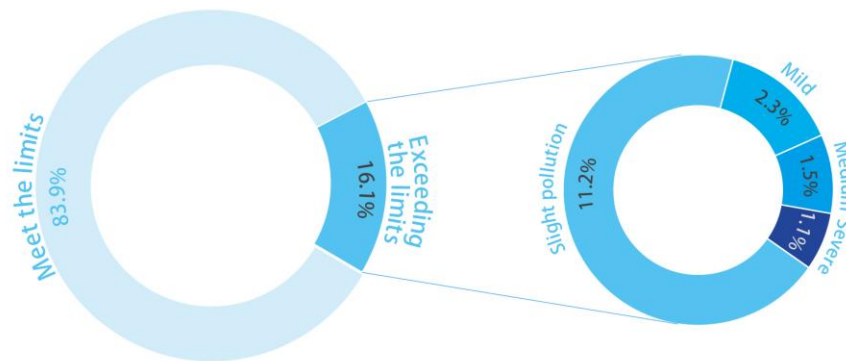
An aerial photograph showing a landscape undergoing remediation. On the left, a concrete dam structure is visible, with a reservoir of greenish water behind it. To the right of the dam, a rocky slope has been stabilized with a grid of grey mesh and planted with numerous small, young trees. A network of light-colored paths or roads winds through the area. The overall scene depicts a transition from a degraded, rocky site to a more vegetated and structured environment.

Soil Remediation Opportunities in China

Soil Remediation in China

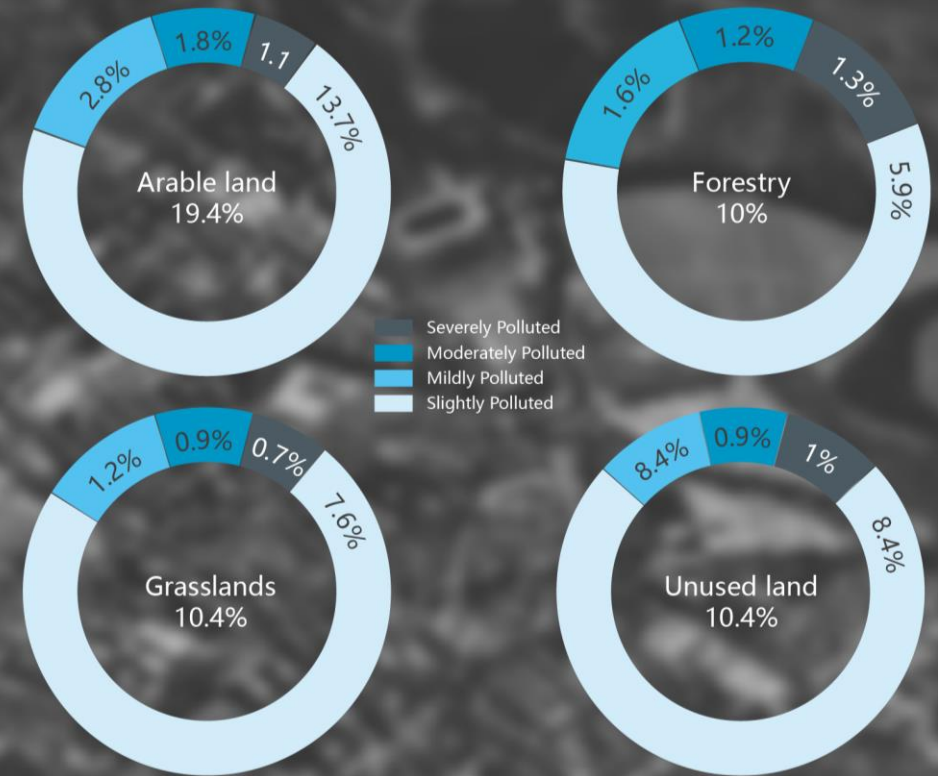
\$15,000,000,000 Market

Overview of Soil Environmental Condition in China



UMORE

The Soil Contamination Overview of Four Sorts of Land Use



Pollutants Pattern in China Region and Major Remediation Technology

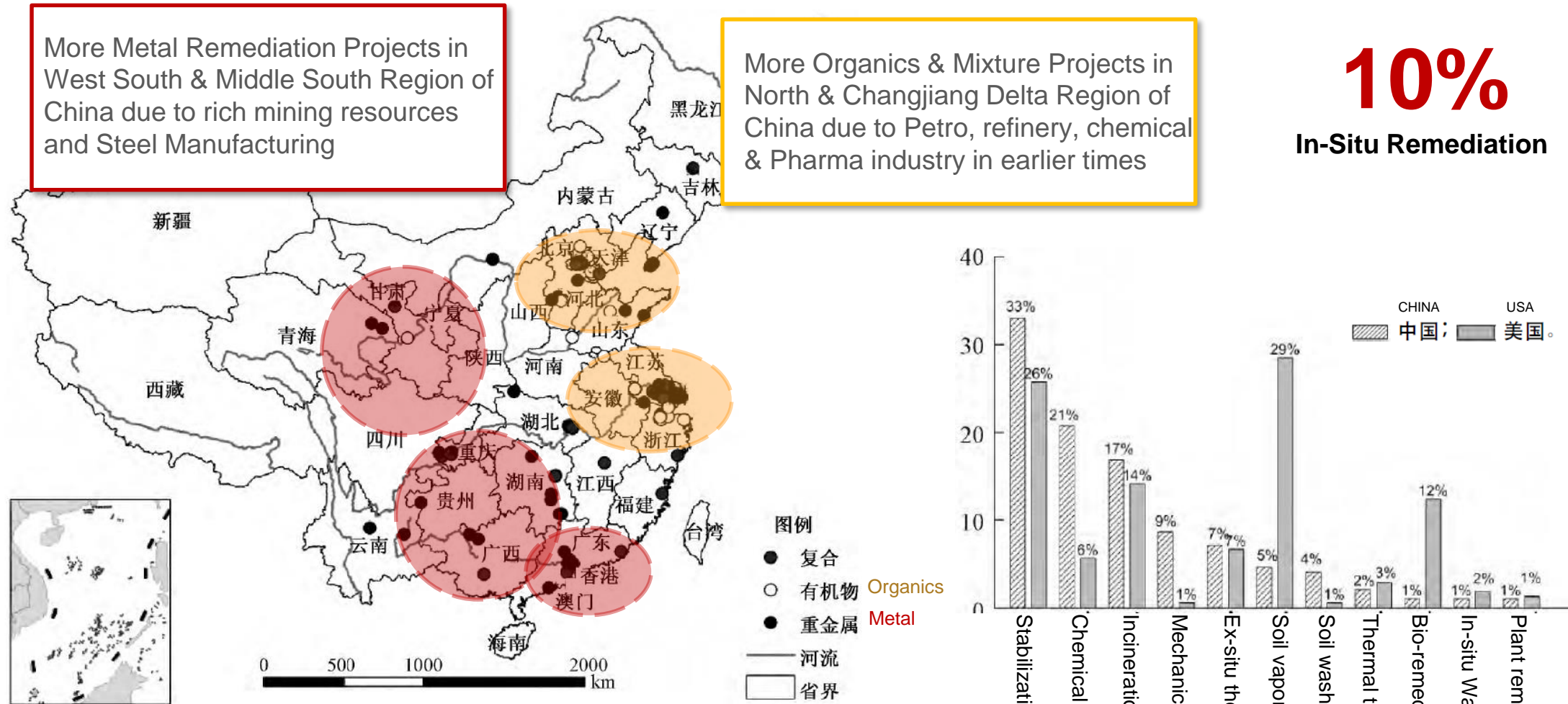
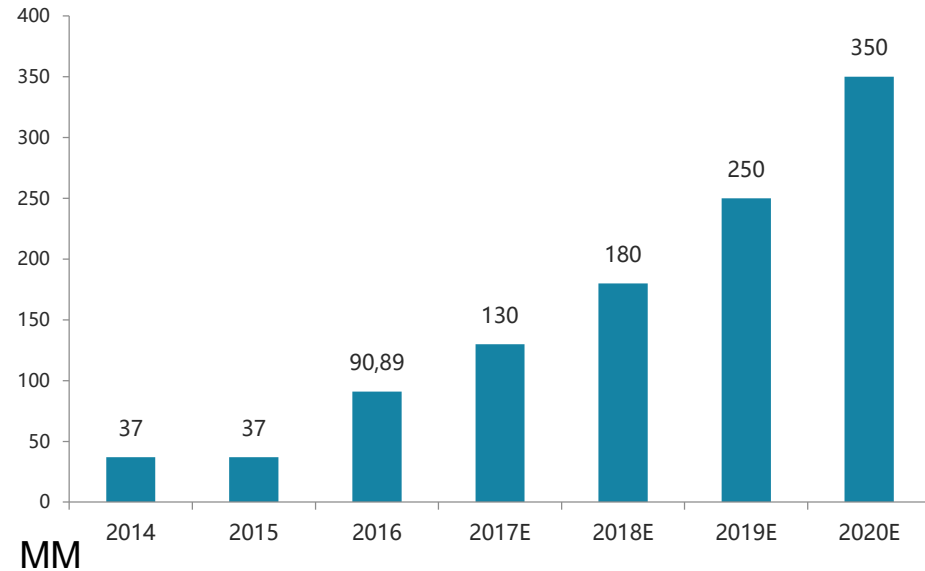


图3 工业污染场地修复项目区域分布

Fig. 3 Regional distribution of industrial contaminated site remediation projects

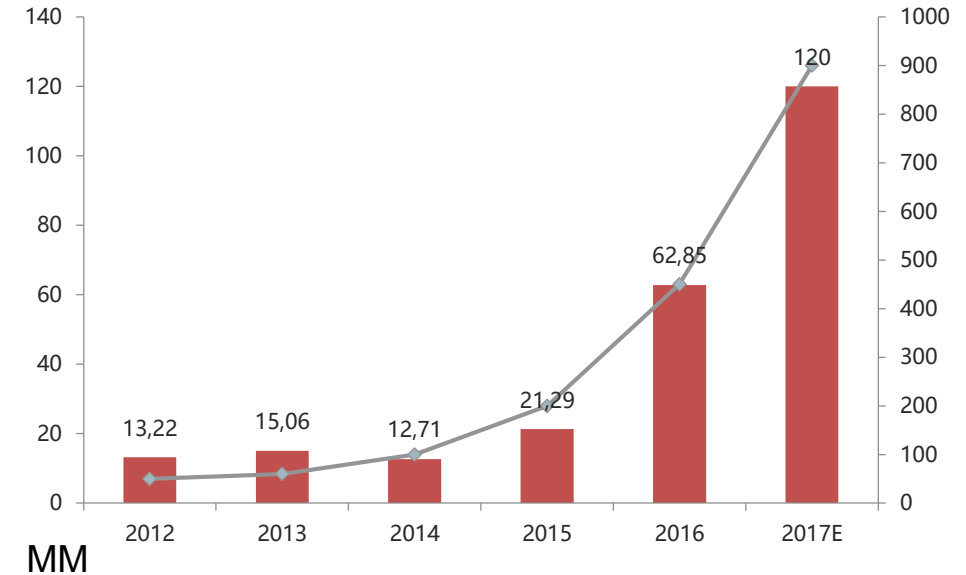
Soil TEN and New Soil LAW Enables the Funding and Projects Growth

Soil Remediation Fund from Central Government



In 2016, it will be 9.089 billion yuan, and it will reach 35 billion yuan in 2020. The total investment in the 13th Five-Year Plan will reach 100 billion yuan from Central Government Soil Remediation Fund

Soil Remediation Project Numbers and Sizes



The soil remediation project data has doubled in 2015. In 2016, the order finance reached 6.285 billion yuan, an increase of 195% compared with 2015. 2017 has reached 12 billion yuan in the year

Overview of Sites Contamination in China

Petroleum/Coking/
Nuclear Fuel



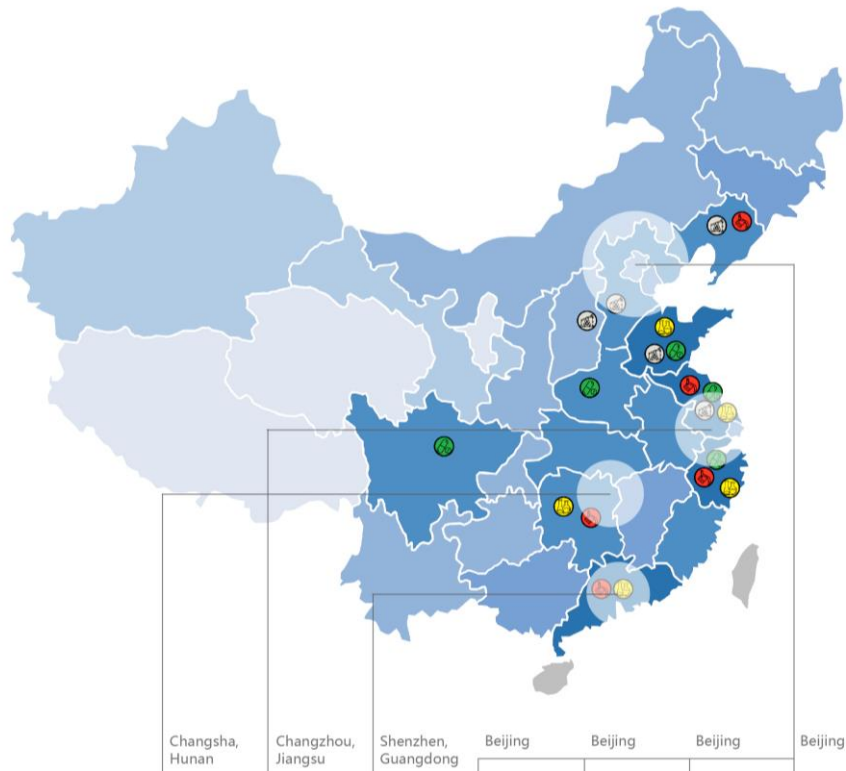
Chemical fuel and
related products



Ferrous / Non-ferrous
Metallurgy



Pharmaceuticals
and Medicine



Companies	yonker 永清环保	Yantai 莱钢	techand 天诚	Yantai 莱钢	BGE 北京国电	CECEP 中电环保	BCER 北京城市环境
Founded	2004	2010	2001	2002	1992	2012	2007
Reg.Capital	¥ 213M	¥ 55M	¥ 808M	¥ 50M	¥ 162M	¥ 100M	¥ 96M
Patents	2	4	n.a.	4	5	n.a.	43
References	14	8	2	7	17	90	120+

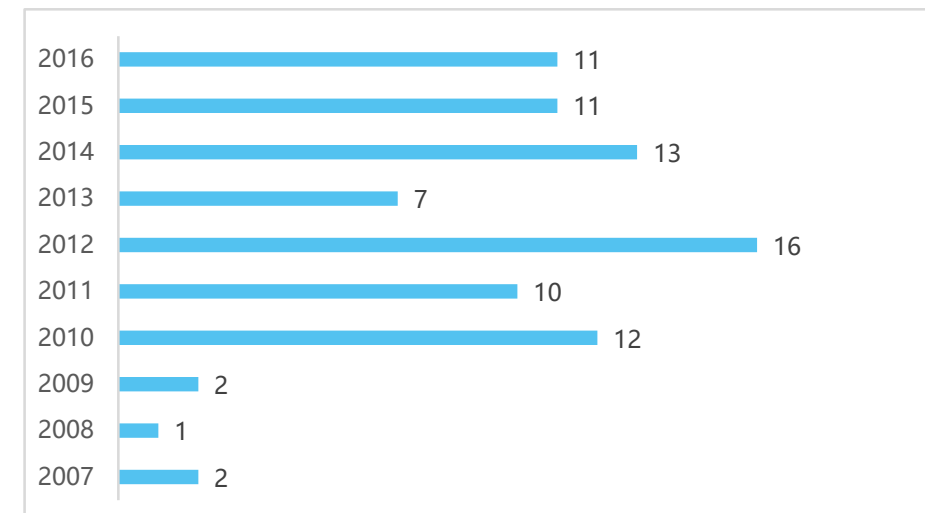
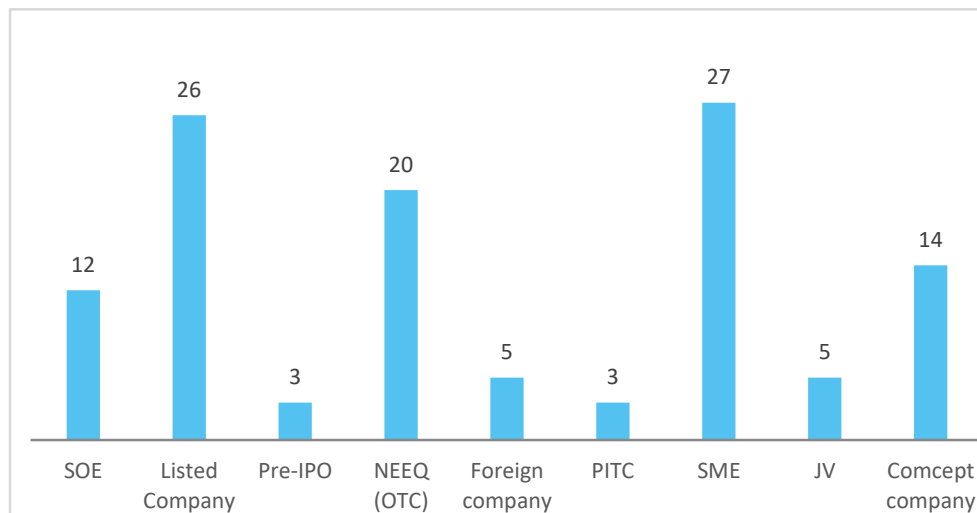
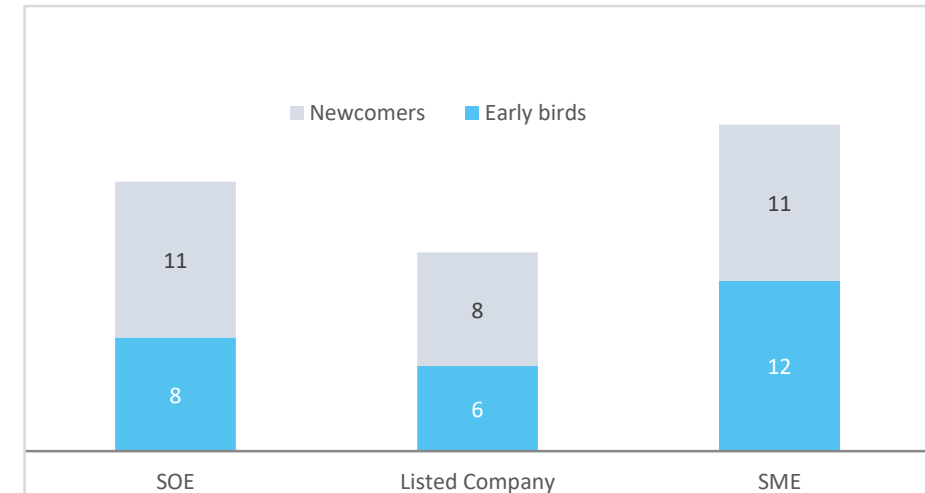
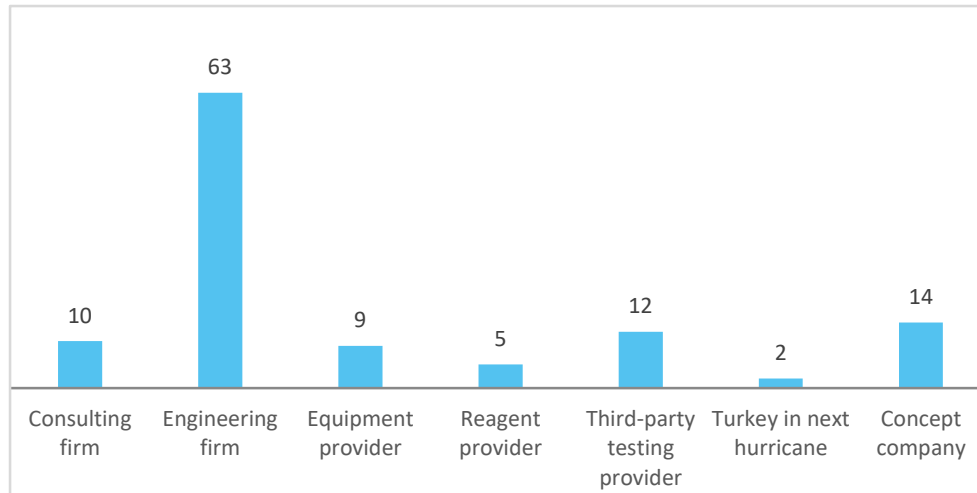
Who are the top players in the market?

Overview of Soli Remediation Companies in China

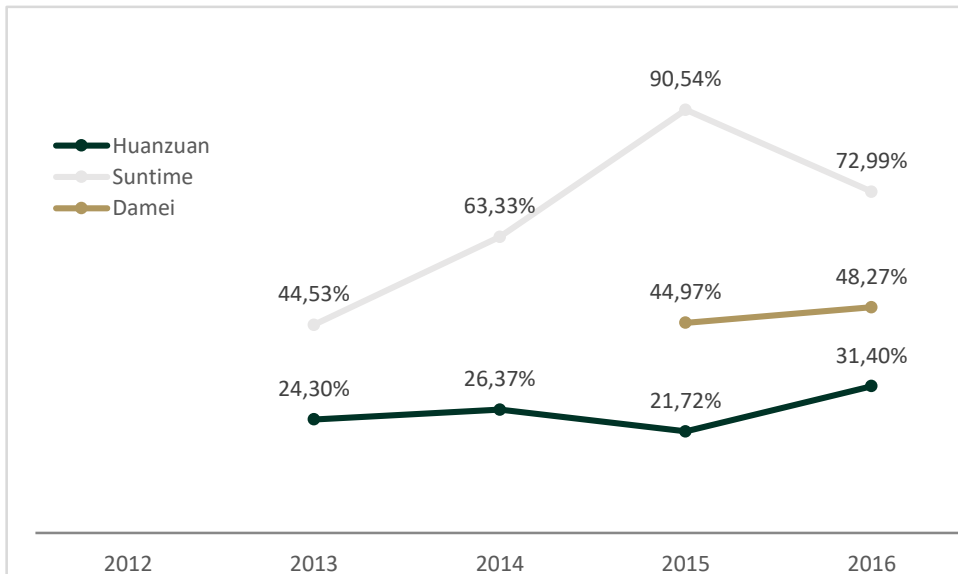
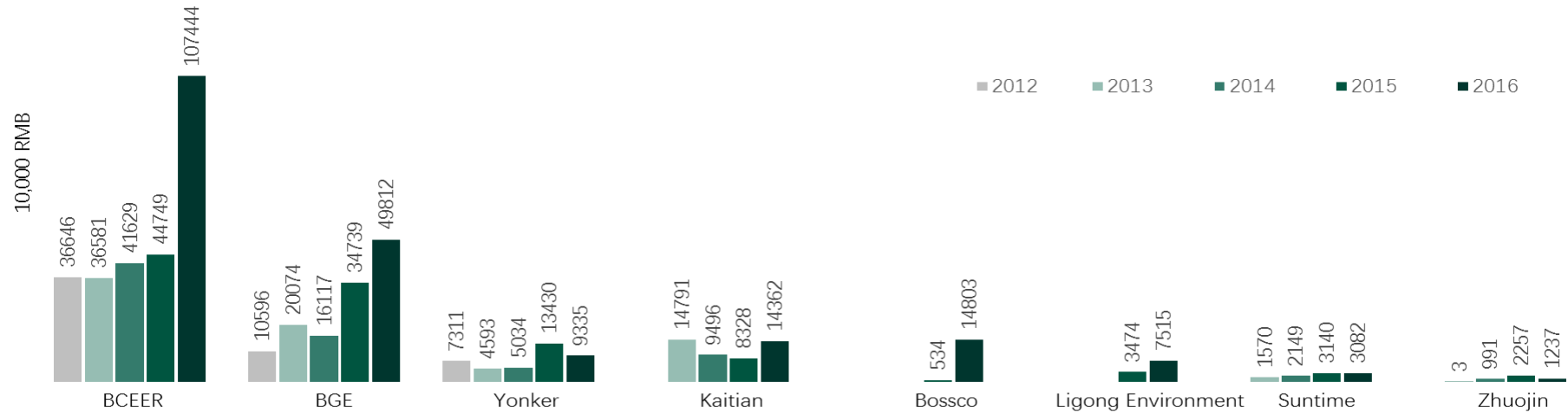


Regional Pattern in China, DELTA region plays strong

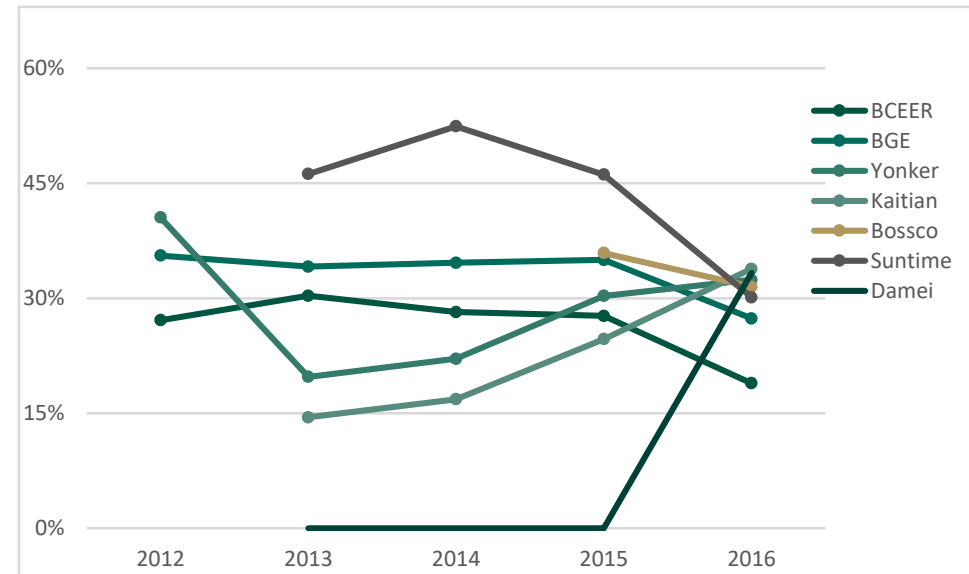
Chinese Soil Remediation Companies Attributes



Revenue & Profitability

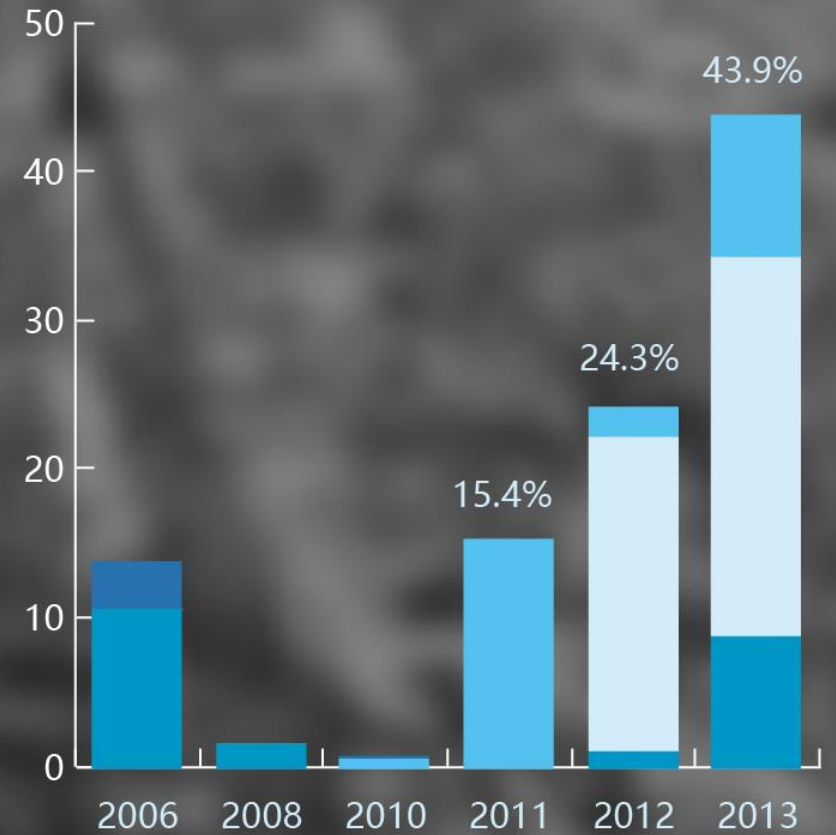
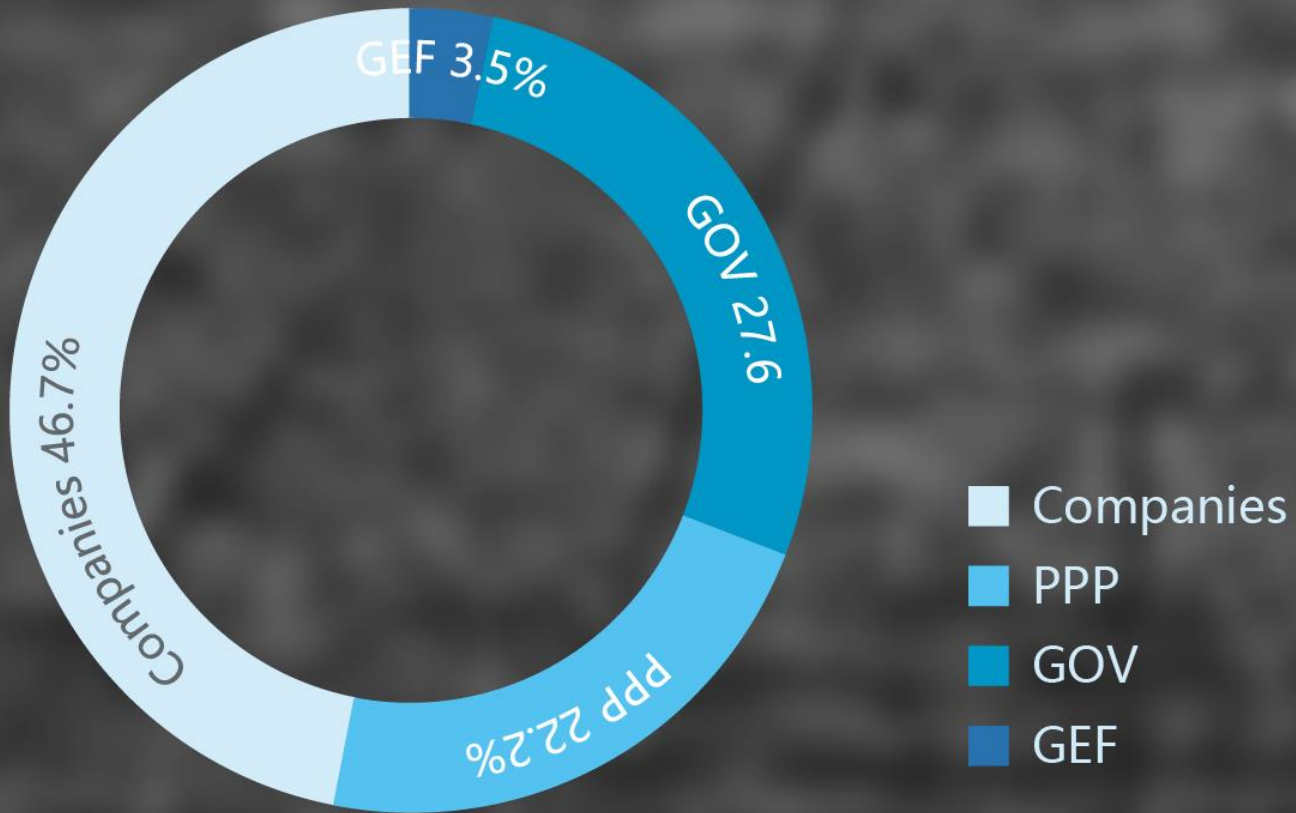


Gross margin of representative remediation consulting firms



Gross margin of engineering business in sampled companies

Where is the money from?



REFERENCE CASE STUDY

Transaction parties:

Beijing Xishan Environment Technology - China
Doranova Oy - Finland

Technology:

DoAct CORE, Modularized *in-situ* soil remediation system

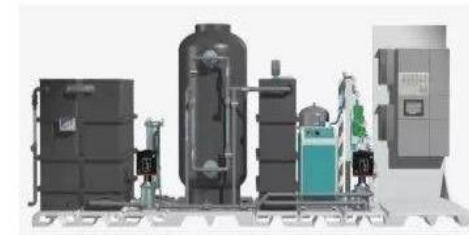
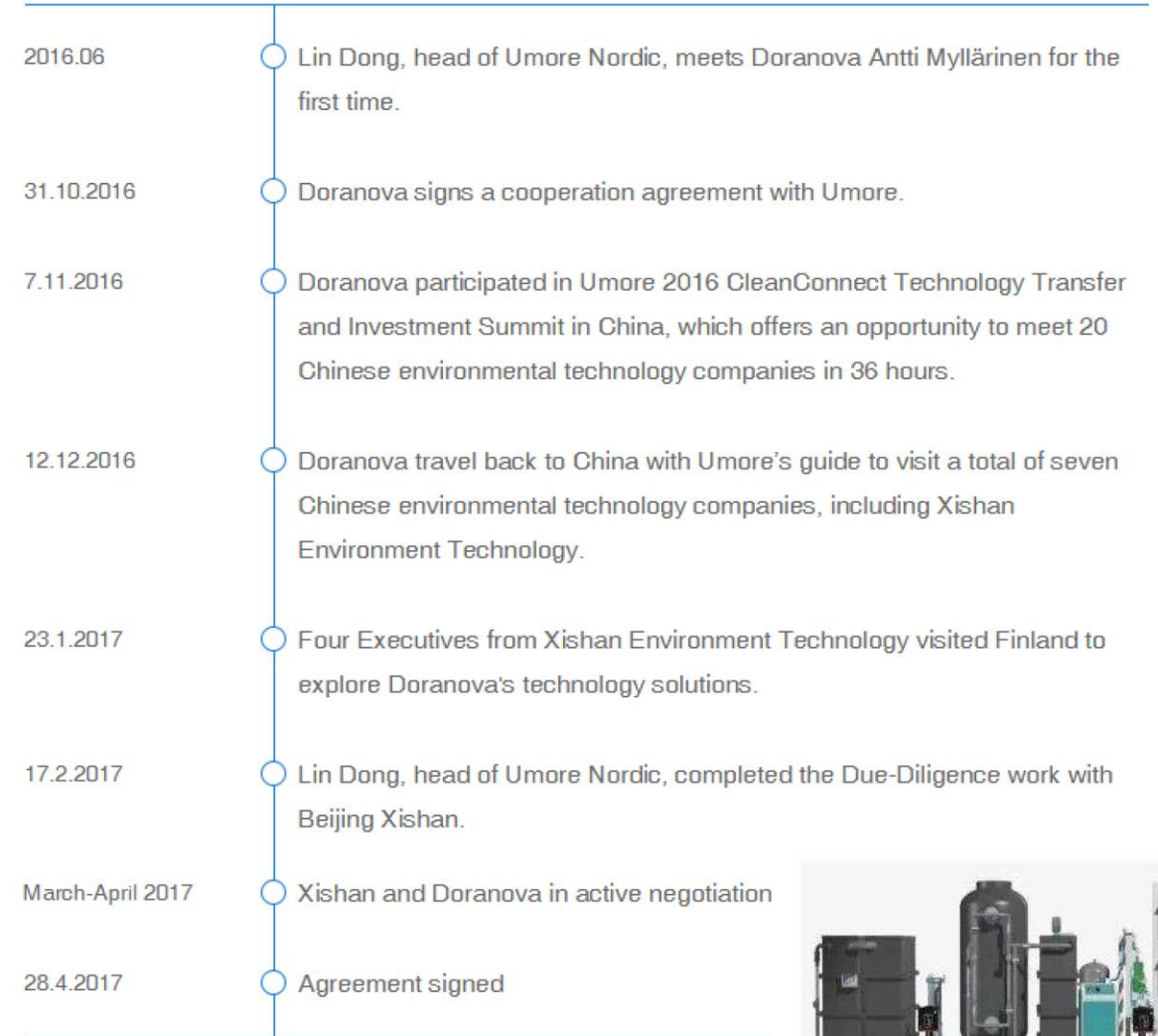


Transaction scope:

Exclusive technology licensing, know-how transfer, and 2 years of equipment purchase



Milestones of Doranova and Xishan's Successful Connection



Shanghai Taopu Smart City Soil and Groundwater Remediation Project

- ▶ Project Size: Contaminated Soil 200,000 m³
Groundwater 130,000 m³
- ▶ Technology: Soil: Thermal Desorption/Soil washing/AO
Groundwater: Separation – Extraction - Treatment
- ▶ Project Budget: 470 million RMB
- ▶ Highlight: The largest project in Shanghai's remediation history

Standardized

Precision

Intelligent

Start from 1950s Taopu is the major chemistry industrial cluster in China. At the beginning of 21st century, chemistry industry are moved out of Shanghai center according to the urban plan. Shanghai Chengtou Group has been assigned to build a smart city demonstration project in this contaminated area from 2015, remediation is the first part of the development.





Plan Your China Journey

What You may Meet in Your China Journey

I have no ideas how to effectively go to China

I have projects and let us do something together

Let us do together, please let me know more about your products

Let us do piloting, please provide your solution and budget

Let us talk about JV, What is share% structure

What is valuation of your company?

Join the Sector specific technology forum will be recommended

Online Marketing is effective in China now

Projects Details to Provide, avoid “over commit”

Ask more details about records what they did before

Prepare a Project Detail rather than product details, Performance is more than product itself, CAPEX/OPEX

Ask Pilot Information to provide with budget range before sending out solutions, Your Budget is a Range!

Be Clear about minority or majority and then always try to be Second to offer %

Profitability is major factor for valuation. P/E is the basic logic for company valuation in China. You need a story maker.

Signing an agreement could be a start of real negotiation

International Cooperation Model

PRODUCT DISTRIBUTION

- Regional Exclusive
- Annual Sales Commitment



TECHNOLOGY LICENSING

- Licensing Fee
- Royalty
- Equipment Sales (OEM)



JOINT VENTURE

- JV Capital: \$10M
- Poten: 45% (Cash)
 - InterChina: 20% (Cash)
 - Aquaporin: 35% (Cash)



Poten+InterChina \$19.5M for 20.1%
Share of Aquaporin with \$1.5M Royalty

EQUITY INVESTMENT (M&A)

- VOC treatment
- 65.6% Transaction, 8.1M CAD

US EP team
100% acquisition, 7.32M USD

100% acquisition
18.1 M equity +109 M debt

80% equity, 62.4M USD

POSITION YOURSELF, SHAPE STRATEGY

PRODUCT DISTRIBUTION

SYSTEM BASED

TECHNOLOGY LICENSING

PRIDICTABLE REVENUE

JOINT VENTURE

TECHNOLOGY DIFFERENTIATING

EQUITY INVESTMENT

PROFITABILITY / ASSET

5 TASKS TO PREPARE BEFORE COMING TO CHINA

- 1 teaser page to State your company's difference in China Market
(Company, Technology, IP, Performance, Team)
- 1 project study to State your company is competitive in technology and Finance performance
(Customer, Industry, Application ,Design, Performance Data)
- 1 cooperation sheet to State why you choose this way as your first priority
(1 ONLY, fact sheet, model proposal & why)
- 1 resource and budget plan to State and fill the gap of your resources in China
(Consultancy, Finance, Legal, Onsite Operation, Communication)
- 1 strategy map to consolidate China as part of your 3 years growth plan
(Impact without China, Enforce Process, Milestone and How)



Effective Marketing Kicks Off your China Journey



REGISTRATION & REMINDER



SETUP TALKGROUP AFTER VERIFICATION



ONE HOUR LIVE TALK



Q&A HANDLING

Testimonials:



- 1 hour online webinar (**Talkmore**)
- 1 week arranged deep dive trip
- 4 regional distribution agreement offer
- 4 months to receive revenue
- China becomes one of important markets

PRODUCT FIT DECIDE THE CYCLE

#CC2018

CLEANCONNECT

2019 THE 6TH INTERNATIONAL CLEANTECH
TRANSFER AND INVESTMENT CONFERENCE

Thursday, 21 – Friday, 22
November

Citic Pacific Zhujiajiao
Jinjiang Hotel
Shanghai, China



WHY.

JOIN



Demand based

To improve matchmaking efficiency, all companies are required to provide business profiles and cooperation expectations. We will provide the detailed matchmaking schedule a few days before the conference.



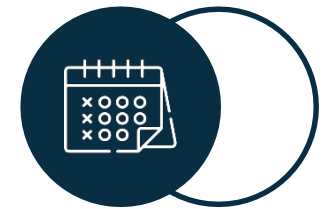
Technology trend grasped

Six themed sub-forums focus on the rising environmental technology trends, embracing participants from government, industry, capital, end-user and academia with common interests to maximum the possibility of business cooperation.



Efficient matchmaking performed

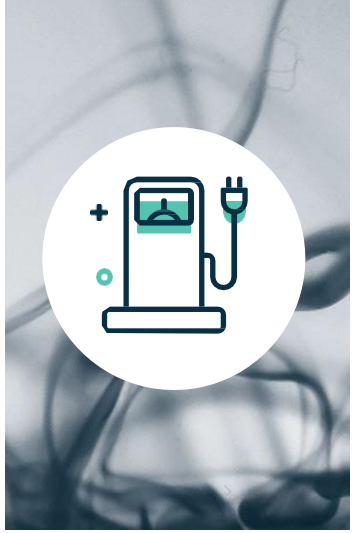
The conference program is designed to create cross-border business opportunities. We build a friendly business-to-business environment, help participants to better understand China's environmental industry progress and market opportunity.



New relationships established

our team will follow up with any cooperation intentions after the conference and provide suggestions or customized solution to maximize the opportunity of a successful soft-landing in China.

Six Forums



Revolutionizing China's Energy Sector Forum

- Renewable energy & new energy
- Smarter energy technologies



Water Treatment and Reuse Symposium

- Industrial water & ZLD
- Energy saving & circular solution
- Rural wastewater & decentralization



Air Quality and Off Gas Treatment Forum

- Ultra-low emission/zero emission
- Colored plume treatment
- Air monitoring



Environmental Remediation

- Soil/ground water remediation
- Ecosystem restoration
- Oil sludge treatment



Waste to Value

- Municipal waste and decentralized treatment
- Waste utilization



Smart Environment Exchange

- Data analysis & AI application
- Sensors, IOT & smart energy

#CC2018

Nov 15-16, Nanjing, China

2 days

300+ attendees

54 roadshows

229 B2B Meetings



FIVE YEARS TRACK RECORD

541

Chinese companies
attended to find overseas solutions

195

Overseas companies
met with China market demand

126

Investors
Introduced with China capital

230

Roadshows
delivered to pitch China buyers

1057



Matchmaking meetings
arranged to initiate business cooperation

1624

Attendees
connected by CleanConnect

POWERED

BY...

CLEANCONNECT CONFERENCE Sponsors and Partners:



Organizer:



PLANNING YOUR CHINA JOURNEY



Rouyu Wu
Oversea Account Lead, CHINA
Rouyu.wu@umoregroup.com
+86 15601976287



Chengyang Huang
Regional Director, Europe
Chengyang.huang@umoregroup.com
+49 15255475556

CHINA EXPERIENCE

- CLEANCONNECT Cleantech Network
- China Cleantech Market Update
- Business Development Planning
- Financing Planning

<http://www.umoregroup.com/>

