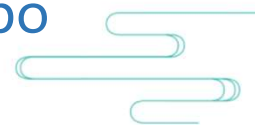


“精诚合作、互利共赢”

——共创宁波垃圾分类新格局

Sincere cooperation, Mutual benefit

——Frame a New Waste Sorting Pattern in Ningbo



## 壹-项目介 *Project introduction*

1

- 项目处理规模800吨/日，其中一期400吨/日，占地115亩，总投3.8亿元；

- total waste treatment capacity is 800t/d, 400t/d at phase1, land occupation is 115mu, total investment is 380million

- 此PPP项目采用DBFO合作模式，政府对项目进行可行性缺口补助，合作期20年（含建设期和运行期）；

- The PPP project adopts DBFO cooperation mode, government provide viability gap funding for the project, and the cooperation period is 20 years (including construction period and operation period).

- 项目公司中市政公用投资公司占40%股份，社会资本（首创环境）占60%股份。 The Share composition of the project is Municipal public investment companies: 40%, and Capital Environment is 60%.

3

- 2018年11月主体工程完工； Nov. 2018, main project completed

- 2019年2月进入试运行； Feb. 2019, trail operation

- 2019年6月各工艺系统具备满负荷运行条件； Jun. 2019, all process systems met full load operation conditions.

- 2019年7月天然气并网。 Jul. 2019, nature gas connected to city gas pipeline network.

2

- 财政部第二批PPP示范项目； 2nd batch of PPP demonstration projects of Ministry of Finance

- 国家发改委第二批PPP典型案例； 2nd batch of typical PPP projects of National Development and Reform Commission

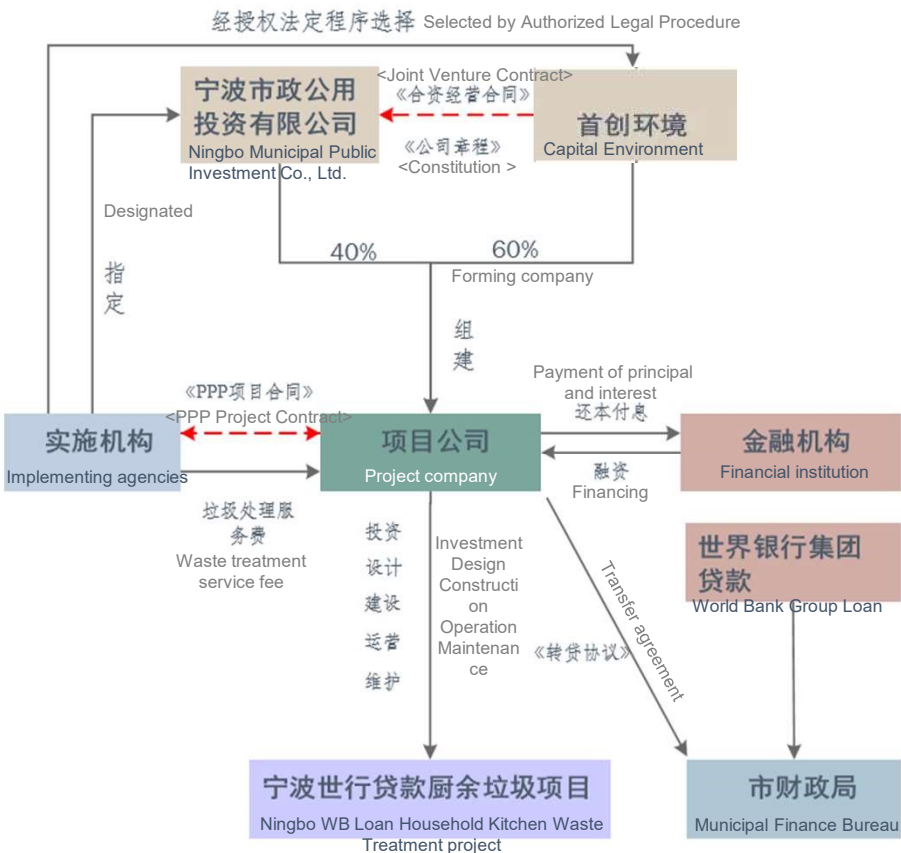
- 国内首个采用世行贷款的厨余垃圾综合处理项目； first PPP project on household kitchen waste treatment with World Bank Loan;

- 国内首个工业绿建三星标准设计和建设的固废项目； first PPP project achieved Three-star Green Building Design Label in solid waste treatment industry.



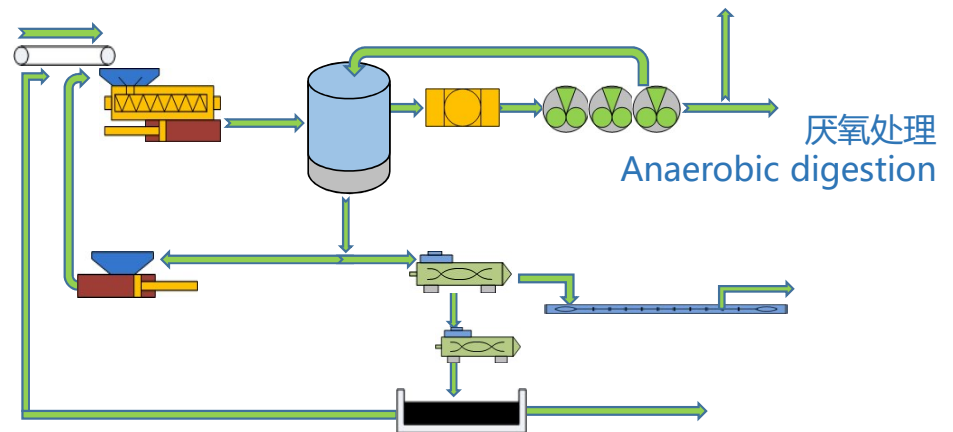
## 贰-亮点 Highlights

### DBFOT交易结构 DBFOT Trading structure



### 技术亮点 Technology highlights

- 工艺系统完整：包括预处理、干式厌氧、沼渣堆肥、沼气提纯、污水和臭气处理六大工艺系统 Complete system: pre-treatment, dry anaerobic digestion, digestion composting, biogas purification, wastewater treatment, deodorization system
- 预处理系统适应性强 Pretreatment system has strong adaptability
- 干式厌氧技术高效、节能 Dry anaerobic digestion technology is featured as high efficiency and low energy costing
- 应用多项绿建技术，如屋顶光伏、立体绿化、辐射空调等 Applying green building technologies, such as roof photovoltaic, vertical planting, radiation air conditioning, etc.
- 园区共享共建 Industry park co-construction and sharing



# 卷-启发和建议 *Enlightenment & suggestions*

## ○ 政府的高度重视 Great attention of government

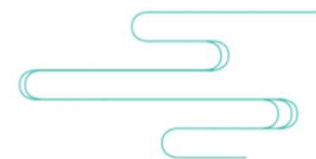
- “效率政府” 快速有力推进项目前期  
"High efficiency government", fast and effectively carrying out the preliminary works of the project
- “阳光政府” 公平公正选择社会资本  
"Sunshine government", fair selection of the social capital
- “有为政府” 积极为项目建设排忧解难  
"Active government", constructively solving the problems for the project construction

## ○ 社会资本方的选择 Choosing social capitalists

- 资金实力雄厚  
Financial Strength
- 同类项目经验丰富  
Similar projects experience
- 技术实力强  
Technical strength

## ○ 先进技术的选择和应用 Application of advanced technologies

- 干式厌氧发酵技术  
Dry anaerobic digestion
- 沼渣堆肥  
Digestion composting
- 沼气提纯制天然气  
Biogas purification





首创环境控股有限公司（简称“首创环境”）是北京首都创业集团有限公司旗下固废综合处置及利用的专业化服务平台，是香港联交所主板上市的红筹公司（HK03989），是为地方政府提供一揽子环境改善方案的综合环境服务商。专注于固废领域的投资、建设及运营管理，提供全产业链城乡固废处置一体化服务，业务涵盖生活垃圾焚烧发电、卫生填埋、有机废弃物厌氧处置、危废综合处置、建筑垃圾资源化利用、电子废弃物处理及资源化利用、清扫保洁、生活垃圾收运等多个细分领域。

项目分布于北京、浙江、广东、福建、河南、江西、江苏、河北等近20个省市地区，是国内固废处理领域屈指可数的同时具备焚烧、生化（干法、湿法）、卫生填埋等三大处理工艺技术的公司。连续多年获得“固废行业十大影响力企业”称号。

公司下属新西兰固废公司，是新西兰最大的垃圾管理服务提供商，市场份额超过30%，服务客户超过30万名。





Capital Environment Holdings Limited, being an industrial investment platform of Beijing Capital Group Co, Ltd. (Capital Group) in the solid waste sector, is a red chip company listed on the Main Board of the Stock Exchange of Hongkong(HK03989), and a comprehensive environment service provider for provision of a basket of environment improvement plans for local governments. Committed to become Chinese leading solid waste investment operators and environmental comprehensive service providers, the company focus on investment, construction and operation management in solid waste field, build an integrated business development system of frontend collection and transportation, back-end comprehensive disposal and resource utilization. Business covers the household waste incineration power generation, sanitary landfill, organic waste anaerobic treatment, dispose and resource utilization of hazardous waste and construction waste, electronic waste treatment and resource utilization, and other fields.

The company's portfolio of projects has a nationwide coverage at integrated garbage treatment, national projects spanning across 20 provinces including Beijing, Guangdong, Henan, Jiangxi, Jiangsu and Hebei, etc. Capital Environment focuses on solid waste treatment industry, equipped with three treatment processes of incineration, biochemical treatment (dry and wet methods) and sanitary landfill; and it wins " Influential Solid Waste Enterprises in China" for successive years.

The company owns a New Zealand solid waste subsidiary which is the largest waste management service provider in New Zealand with 30% market share and serving Nearly 300,000 customers.



**谢谢大家**  
**Thank you**