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苏州工业园区中法环境技术有限公司

Suzhou Industrial Park Sino-French Environmental Technology Co., Ltd.

苏州工业园区污泥干化处置项目简介

Brief Introduction on Sludge Drying Project at Suzhou Industrial Park

2014-5-8

公司介紹

Company Introduction



公司介绍

Company Introduction

公司简介

About Us

- **公司名称** 苏州工业园区中法环境技术有限公司
Suzhou Industrial Park Sino-French Environmental Technology Co., Ltd.

- **成立日期** 2009年4月
Established in April 2009

- **主要业务 Main Business**

污泥安全环保处理处置 Sludge treatment and disposal

工业废水处理 Industrial wastewater treatment

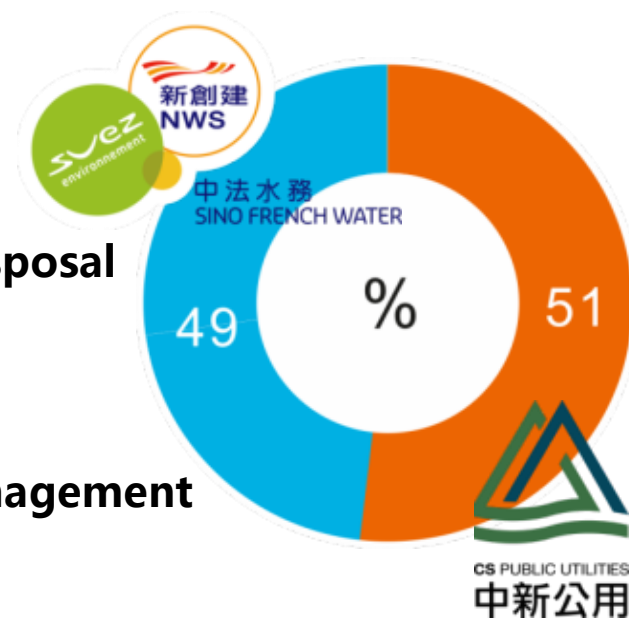
固废处理 Solid waste treatment

城市垃圾管理等环保领域业 Municipal waste management

- **股东方 Shareholders**

中新苏州工业园区市政公用发展集团有限公司 China-Singapore Suzhou Industrial Park Public Utilities Development Group Co., Ltd.

中法水务投资有限公司 Sino-French Water Development Company Limited



公司介绍

Company Introduction

强大的母公司

Parent Company



中新公用

CS PUBLIC UTILITIES

China-Singapore
Suzhou Industrial Park
Public Utilities
Development Group
Co., Ltd.

核心业务
Core
Business

水务

Water

燃气

Gas

热电

Heat Supply
& Power
Generation
Environmental
Technology

环境技术

能源服务

Energy
Services

市政工程建设

Municipal
Engineering
Construction

房地产开发

Real Estate
Development



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强大的母公司

Parent Company

中法水务在中国**18**个城市，拥有**26**家项目公司，其中**2**个是污泥项目

Strong presence of Sino-French Water in China: 26 project companies in 18 cities, of which 2 are sludge treatment projects.



苏州工业园区污泥项目介绍

Brief Introduction on Sludge Treatment Project
at Suzhou Industrial Park



项目基本情况 Basics

项目名称：苏州工业园区污泥处置及资源化项目一期工程
Title: Phase 1 of Sludge Treatment and Utilization Project

项目选址：苏州工业园区车郭东路
Location: Cheguodong Road, Suzhou Industrial Park

主要业务：处理园区污水厂产生的所有污泥
Main Operation: All sludge produced by sewage plants within Suzhou Industrial Park

处理能力：每日300吨脱水污泥
Capacity: 300 ton/day dried sludge



采用技术：两段式污泥干化工艺 (Innodry 2E)
三条独立生产线 (每条生产线处理能力100吨)

Technology: Innodry 2E, a new-generation technology (2-phase drying) patented by Degremont

技术性能：将污泥的固体含量从20%干化到70-90%
Performance: dried sludge content increased from 20% to 70-90%

最终用途：干污泥与煤混合送至发电厂用作燃料
Final disposal: Co-fired with coal for power generation

苏州污泥项目工艺选择依据

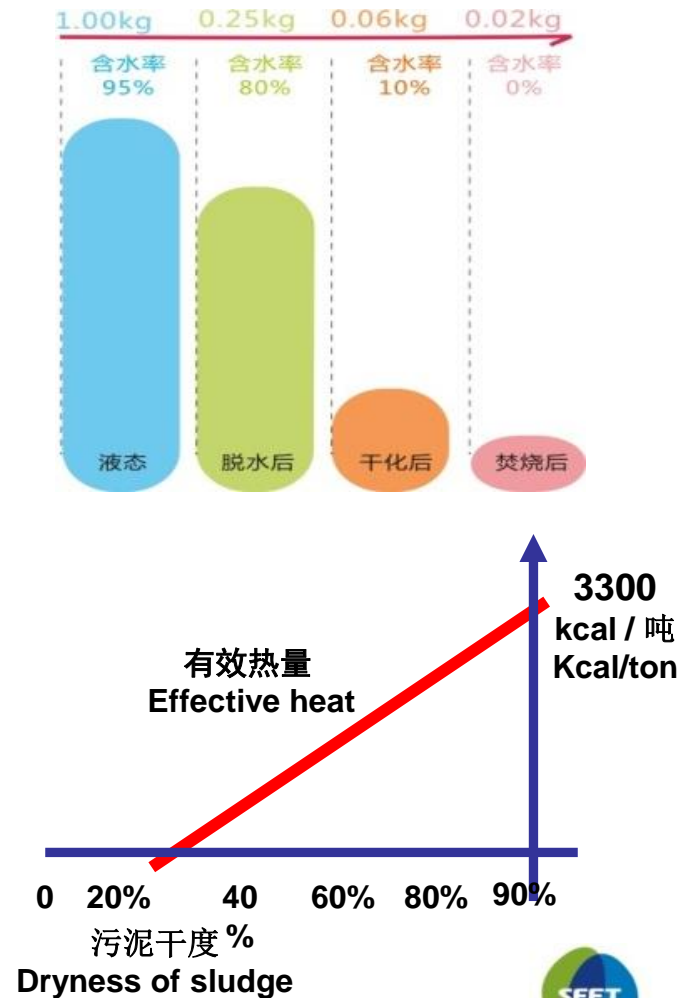
Rationale of technological process

- 不能土地利用 No land application
- 污泥热值高，作为生物质能回收能量
High NCV of sludge
- 体现循环利用理念 tenet of recycling and reuse
- 可最大限度减量 Maximum reduction of sludge volume
- 灰渣可作为建筑辅材 Ash used for auxiliary building materials



污泥干化混烧的工艺路线

Technological process of sludge drying and co-firing



建设历程 Chronology

Feb. 28th 2010

>>

Jan. 25th 2011

>>

Apr. 15th 2011 >> May. 06th 2011



开工建设

Construction commenced



干化系统出干泥

Drying system started producing dried sludge



项目竣工

Project was commissioned



转成正式生产

Operation started

项目特点 (一)

Project features (1)

泥水并重、水泥统筹

Sewage and sludge equally prioritized

污水管网**100%**覆盖

污水**100%**收集

100% coverage of sewage pipeline

100% collection of sewage

污水**100%**处理

尾水**100%**达标排放

100% treatment of sewage

100% compliance with discharge standard

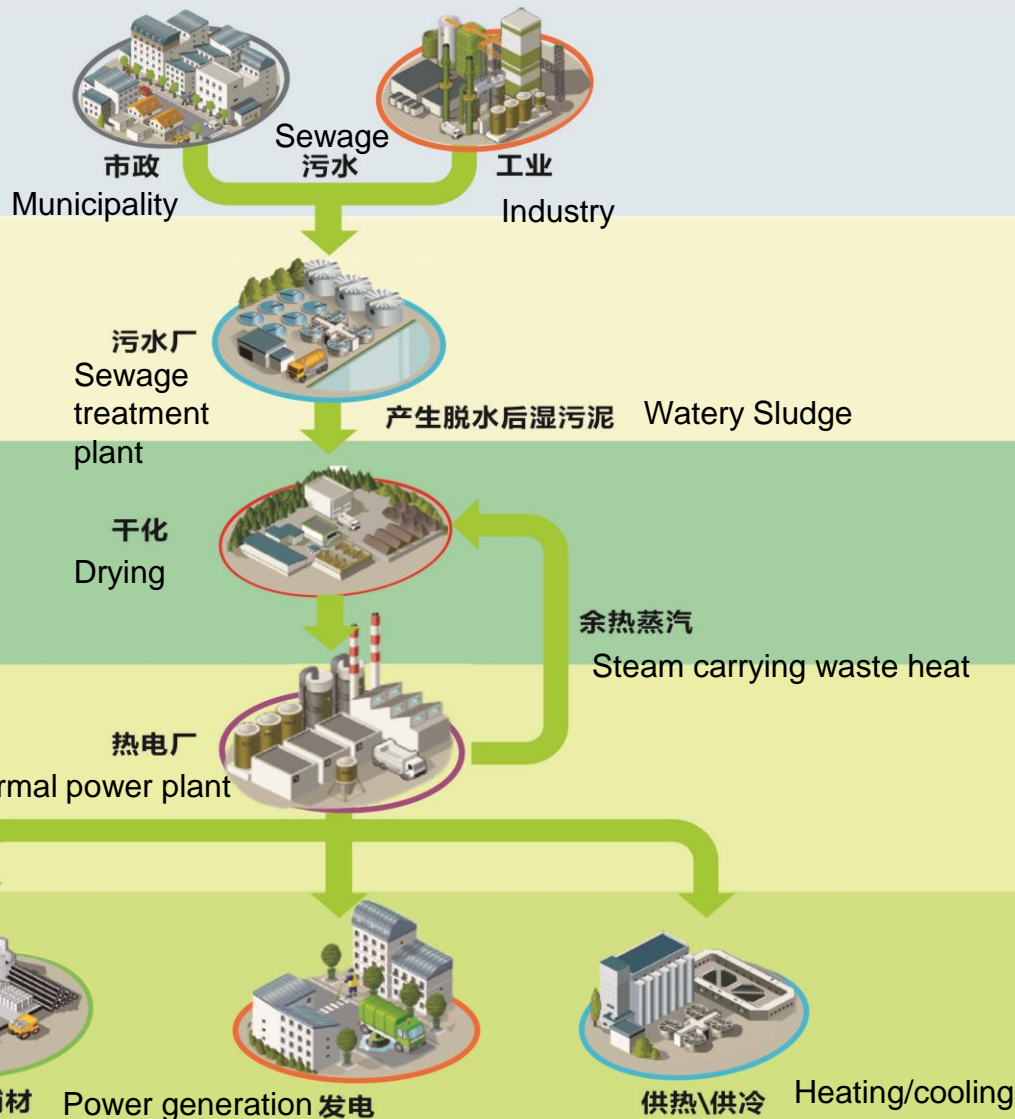
污泥**100%**无害化、减量化

与稳定化处置

100% non-hazardous treatment, volume reduction, safe disposal

污泥资源化利用

Utilization as resources



项目特点 (二)

Project features (2)

产业协同、循环利用

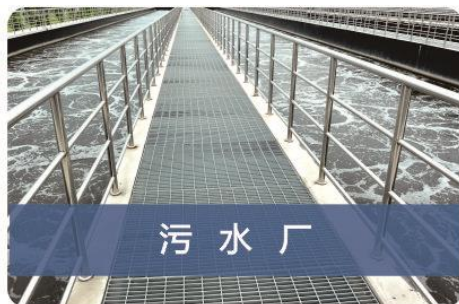
Synergism and recycling



苏州工业园区

Suzhou Industrial Park

污水
Sewage



污水厂

Sewage treatment plant

污水
Sewage



湿污泥
Watery
Sludge



再生水
Reclaimed
water

再生水
Reclaimed
water

干污泥
Dried
sludge

干污泥
Dried
sludge

蒸汽冷凝水
Steam
condensed
water

蒸汽冷凝水
Steam
condensed
water

建筑辅材
Auxiliary Building
Materials



水泥厂

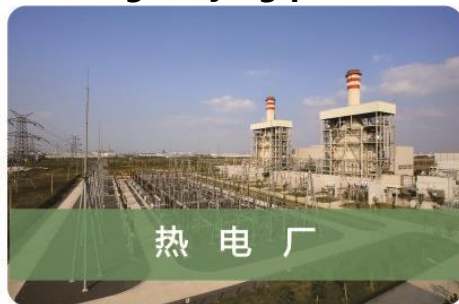
Cement plant

余热蒸汽
Waste
heat
steam



污泥干化厂

Sludge drying plant



热电厂

Thermal power plant

灰分
Ash



项目特点 (三)

Project features (3)

节能低耗、安全可靠

Energy Conservation, safety and reliability

一级薄层蒸发器干燥至
40-50%
Phase-1 evaporator



切碎机把污泥挤压成
“面条”
Shredding



热蒸汽
循环回收
Steam
recycling



稳定卫生的干燥污泥
Dried sludge



二级带式干燥机干燥至
70-90%
Phase-2 Drier

➔ 低能耗 Low energy consumption

- 第一段产生的废热回到二段使用，节约30%的热量

Waste recovery from phase 1 for use at Phase 2. Saving by 30%.

- 仅消耗0.8吨余热蒸汽/吨水蒸发量
0.8 ton waste heat steam per ton of water evaporation

➔ 低温 Low temperature

- 污泥接触温度不超过105°C

Sludge contact temperature below 105 °C

➔ 无尘 Dust-free

- 污泥在塑性最好时成型

Sludge forming at optimal plasticity

项目特点（四）

Project features (4)

安全环保、根治三废

Safety and Environmental Protection

废气

Waste Gas

建立相应废气收集处理设施，废气经无害化处理，达到国家相关标准后排放

Waste gas collection and treatment in non-hazardous manner. Discharge compliance.

废水

Wastewater

污泥处理处置过程产生的废水应全部回收，送往污水处理厂进行进一步处理

Wastewater generated in sludge treatment process is collected and further treated.

废渣

Ash

污泥处理处置过程产生的废渣可作为建筑辅材回收利用

Ash generated in sludge treatment process is collected for reuse as building materials



项目节能减排效果

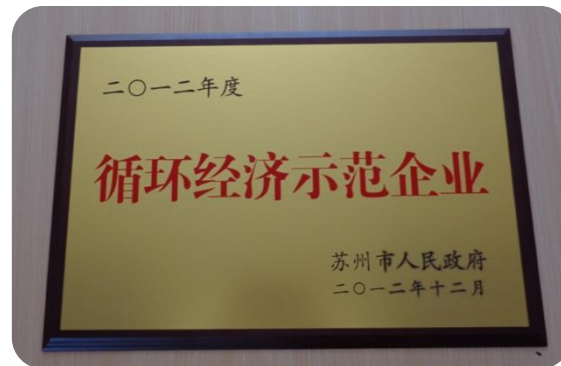
Energy Saving and Emissions Reductions



- ➔ **干污泥作为燃料，每年共计可节约煤炭12,000吨**
Coal savings of 12,000 ton/year attributable to dried sludge used as alternative fuel
- ➔ **最终的灰渣做为建筑辅材，每年可减少固体垃圾10,000吨**
Reduction of solid waste of 10,000 ton/year attributable to ash used for auxiliary building materials
- ➔ **蒸汽冷凝水回送至东吴热电厂重新利用，每年可节约脱盐水约76,000吨**
Reuse of steam condensed water at thermal power plant, contributing to savings of desalted water of 76,000 ton/year
- ➔ **每年避免污泥填埋占地9公顷**
Avoidance of the need for sludge landfilling, contributing to land savings of 9 hectare per year



项目荣誉 Honors & Awards



- **江苏省首批城建示范工程** 1st batch urban construction demonstration project in Jiangsu Province
- **苏州市循环经济示范项目** Circular economy demonstration project in Suzhou City
- **太湖流域治理重点工程** Taihu Lake Basin governance key project
- **上海市优秀工程勘察设计项目二等奖** 2nd-class award for project design excellence in Shanghai
- **苏州工业园区生态文明推进工作先进单位** Award for ecological civilization development at Suzhou Industrial Park
- **江苏省节能和循环经济项目** Energy saving and circular economy project in Jiangsu Province

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苏州污泥项目运行情况

Briefing on project operation



运营历程 Operational Progress



2014



截止目前：处理湿污泥达220,000吨

As of now: total treatment of watery sludge of 220k ton



**7月：通过最终性能测试
单日最高处理能力再次达到350吨**

July: Accomplished final performance test.
Daily peak treatment capacity reaching 350 ton.

2012



12月底：累计处理污泥45,000吨

End of Dec: Accumulative treatment of 45,000 ton



6月24日：单日最高处理能力达到350吨

24 June: daily peak treatment capacity reaching 350 ton



6月15日：累积处理量达到10000吨

15 June: Accumulative treatment of 10,000 ton



5月6日：三条线连续试运行

6 May: Continual commissioning of 3 lines

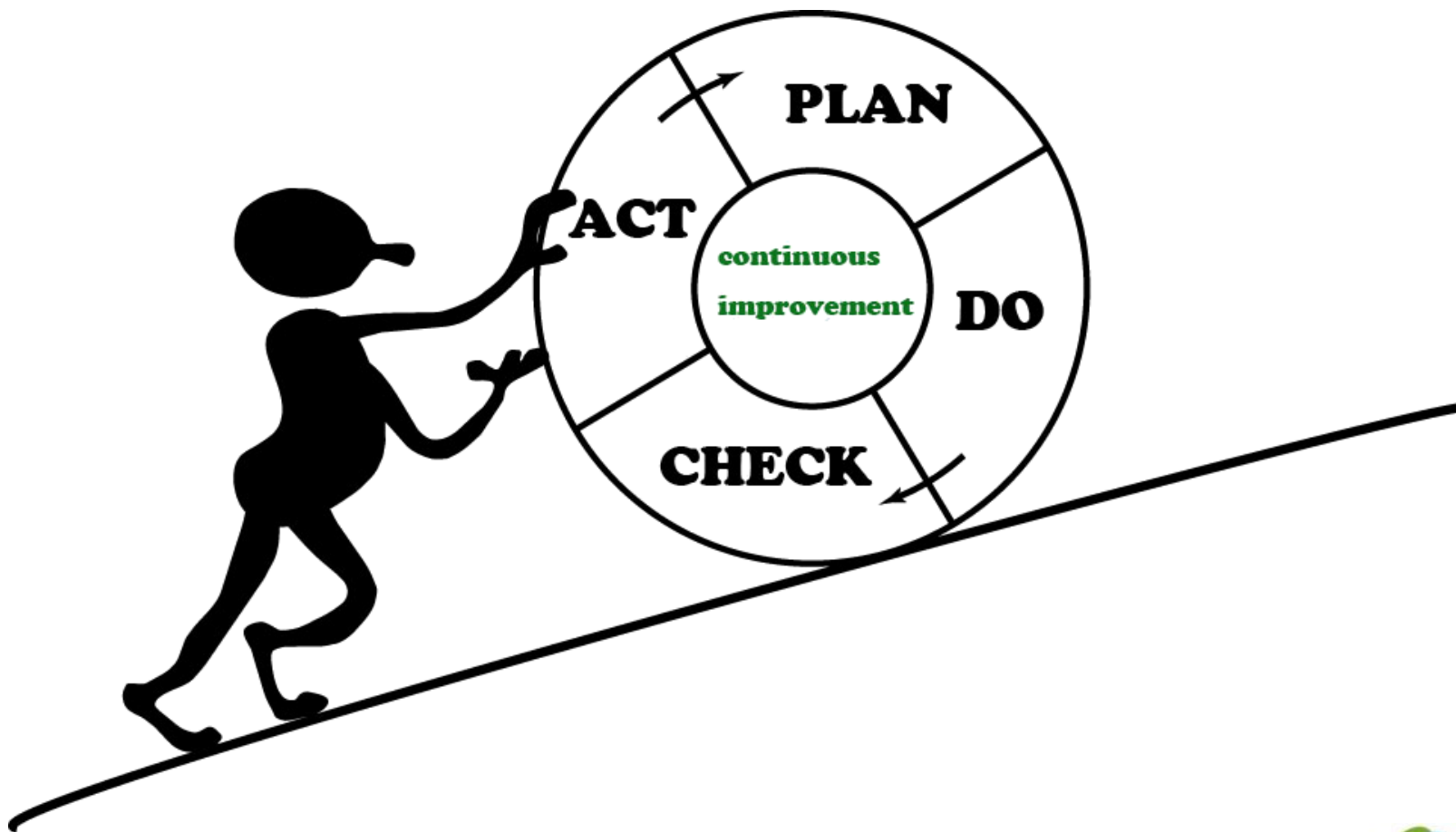
2011



4月15日：竣工典礼

15 Apr: Project completion ceremony

管理理念 Management Philosophy



生产标准化 Production Standardization

2012年7月6日通过SGS “三标一体” 认证

Verified and certified by SGS in Jul 2012



生产标准化 Production Standardization

2013年9月获得江苏省环境污染治理设施运营资质证书

Certificate of qualification for operating environmental pollution management facilities awarded by Jiangsu Province authority in Sep 2013.



环境污染治理设施运营资质证书

单位名称： 苏州工业园区中法环境技术有限公司
登记地址： 苏州工业园区展业路18号中新生态大厦A209室
法定代表人： 张文
证书编号： 苏-临-有机废物处理-0122
运营类别与级别： 有机废物处理，临时
有效期限： 2013年9月-2015年8月

发证时间： 二〇一三年九月五日



中华人民共和国环境保护部监制



中法环境
SINO-FRANCE ENVIRONMENT

管理精细化 Sophisticated Management

Organization

整理
SEIRI

Neatness

清洁
SEIKETSU

Rectification

整顿
SEITON



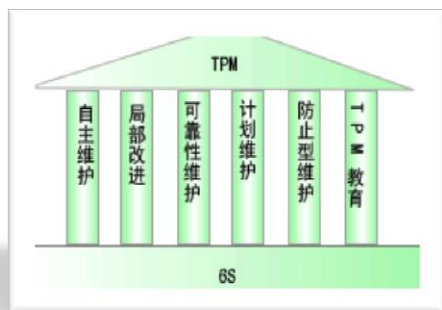
清扫
SEISO

Quality

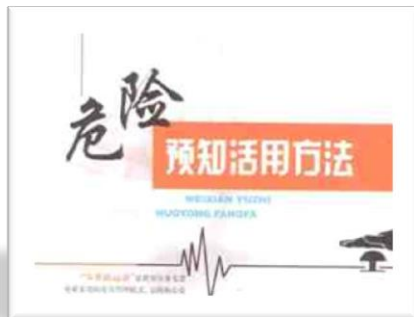
素养
SHITSUKE

Clean

管理精细化 Sophisticated Management



TPM



KYT



OPL



JIT



AB岗



QCC

管理精细化 Sophisticated Management

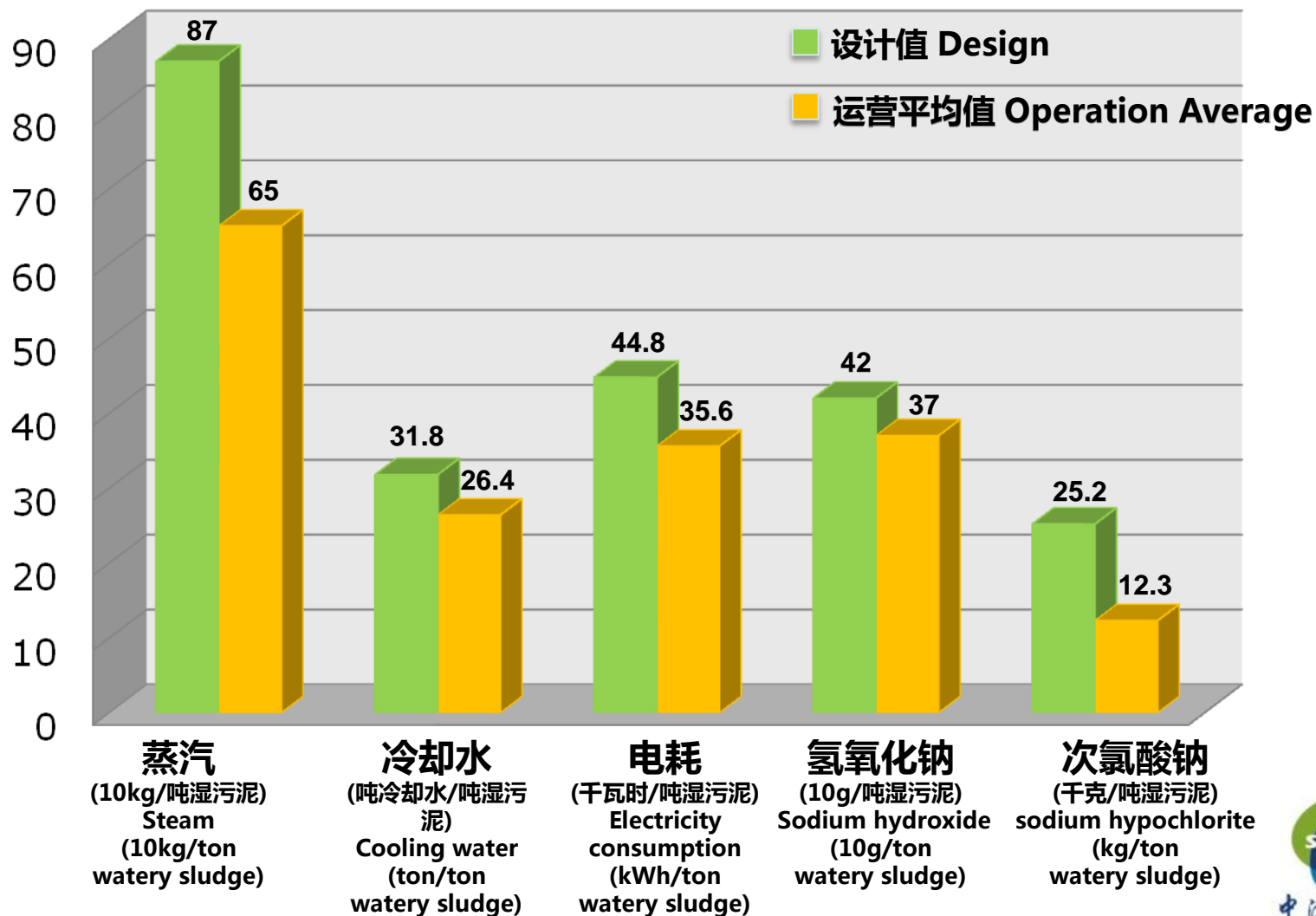
2014年获得苏伊士环境、中法水务创新奖

Suez Environment Award and Sino-French Water Award in 2014



主要性能介绍

Performance Indicators





中法环境
SINO FRENCH ENVIRONMENT

谢谢！
THANKS!