

Company Presentation

2020.11





GREEN · SAFE · DEVELOPMENT

CONTENTS

01 Company Profile Operating Performance









Company

GSD Technologies Co., Ltd.

Stock Code

+ 6641

Established

• Oct.,2013

Chairman

◆Hung-June, Hsieh

Paid in capital

◆NTD 340 Millions

Major business

 Water and waste water equipment manufacturing, sales and technical services

Brand

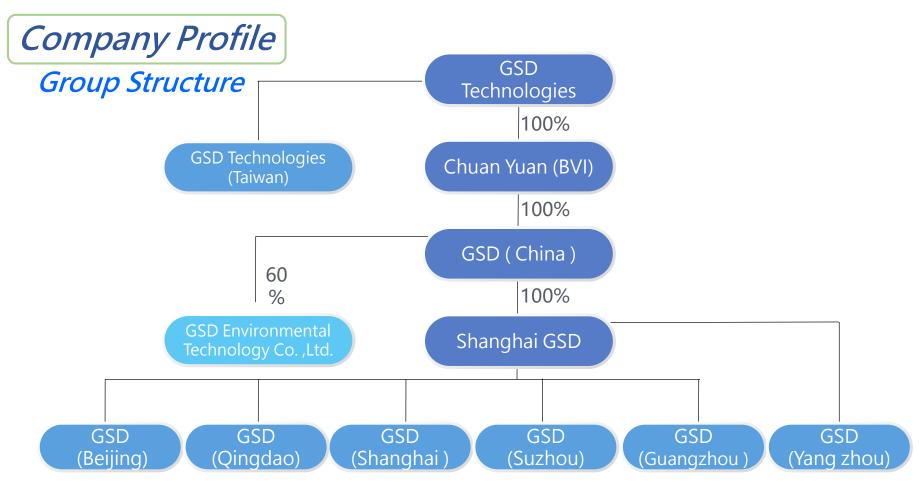
+ GSD

2 Plants

Pinghu & Yangzhou

Staffs

◆ 556 employees (2020.09)



Company Profile Business Philosophy

A promise to keep the nature environment to be green for **GREEN**

the Earth.

A promise to keep quality of products to be safe for SAFF

customers.

DEVELOPMENT A promise to keep company developing for staffs,

stockholders and society.

Mission 8 Vision

Mission: To optimize the ecological environment and to benefit the

whole world.

Environment: All rivers are clean and no water is dirty.

The paragon among all brands, the leader in WWTP industry. Company:

To enable our staff' s devotion in wonderful career and life. Colleagues:

ESG





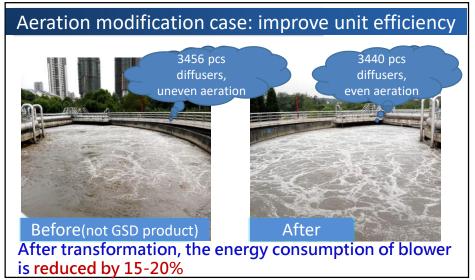






- Support Hubei new infectious disease hospital.
- Solar power generation electricitysaving.
- Support local river governance.
- Construction of sponge factory.
- Continuous development of energy saving products.

ESG









Customized matching design reduces 4kw motor power.

A number of GSD products have energy-saving certification. Through design, customization, process transformation and IoT, GSD can help customers to reduce costs and energy.

Product Scope

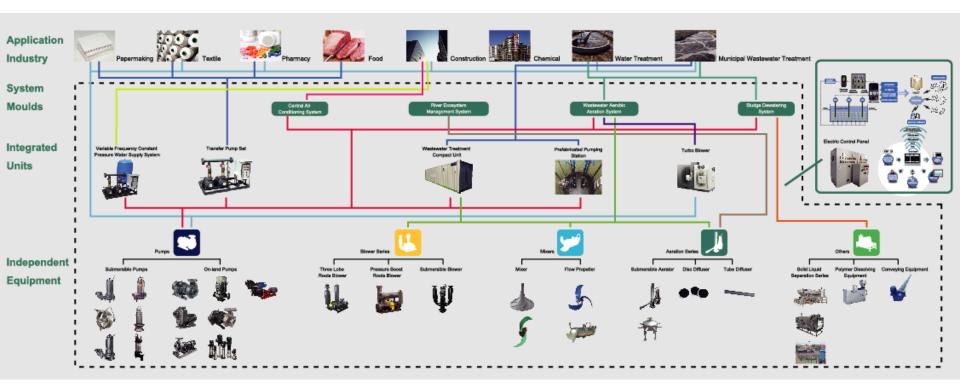








Product Scope & Application



10

Invest TAIWAN



GSD Technologies (Taiwan) was established in 2019.



NCKU-GSD Hydrotech Reasarch Center was established in 2019.

Organizer: Environmental Protection Administration, Executive Yuan

Location: Taipei Evergeen International Convention Center

Topic: Joint Efforts to Reduce Pollution & Create Sustainability





Organizer: Construction & Planning Agency Ministry of the Interior

Location: Taipei Evergeen International Convention Center

Topic: Comprehensive Start-Perspective Sewage Sewer Smart Management Forum





Organizer: GSD & Advantech

Location: Kaohsiung Metal Industries Research & Development Centre

Topic: Smart Factory New Blue Ocean, Intelligent Plant Innovation & Application





Most of the guests were well-known enterprises in the south area of Taiwan. Through the "AloT cloud management platform for water resources" and online digitization, GSD achieves in the digitalization of sewage water treatment were presented.



Organizer: Taiwan External Trade Development Council

Location: Taipei World Trade Center

Topic: Taiwan International Water Week (TIWW)



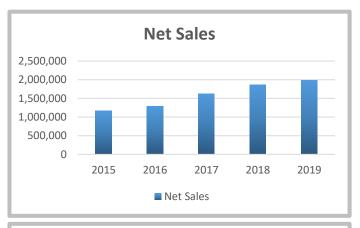


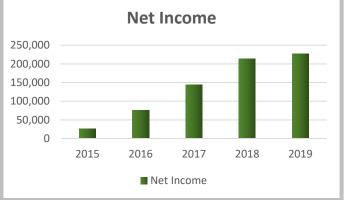




Consolidated income statement

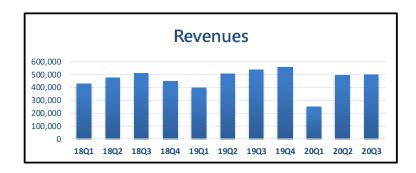
Items	2015	2016	2017	2018	2019
Net Sales	1,171,289	1,290,919	1,622,684	1,867,639	1,992,051
Growth Rate		10.21%	25.70%	15.10%	6.66%
Sales Margin	452,080	503,034	635,387	739,292	771,093
Op. Income	36,039	81,169	189,557	263,642	240,532
EBIT	42,662	106,469	202,756	280,499	282,631
Net Income	25,773	75,529	144,433	213,672	227,154
Income Growth%		193.05%	91.23%	47.94%	6.31%
EPS(Basic)	0.86	2.52	4.81	6.86	6.79
EPS (No.of shares at end of year)	0.86	2.52	4.81	6.28	6.79

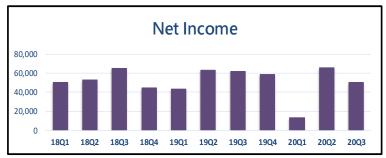




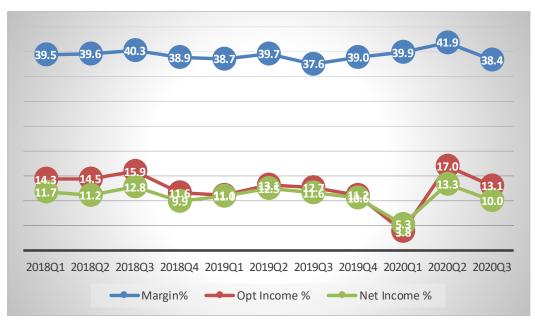
Consolidated income statement

Items	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3
Net Sales	430,567	476,365	510,410	450,297	394,512	505,098	535,690	556,751	248,663	493,929	501,031
Sales margin	170,020	188,768	205,466	175,038	152,536	200,285	201,412	216,860	99,188	207,187	192,320
Op. Income	61,625	68,843	81,024	52,150	43,969	66,249	68,149	62,165	9,338	83,944	65,398
EBIT	67,496	72,644	83,817	56,542	55,620	81,035	79,788	66,188	17,589	91,686	67,861
Net income	50,561	53,214	65,101	44,796	43,230	63,256	61,927	58,741	13,171	65,935	50,296





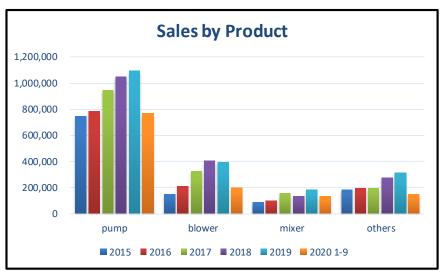
Profitability



Gross Margin

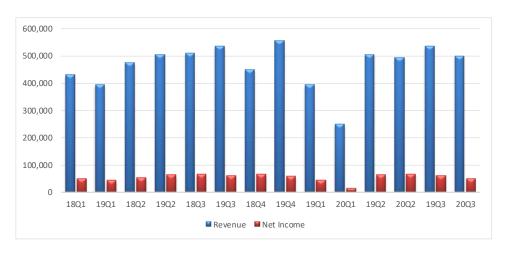
Operating Margin
Net Profit

Revenue by products



item		2015		2016		2017		2018		2019		2020 1-9	
item	AMT	%											
ľ	oump	745,671	63.66	787,805	61.03	945,796	58.29	1,051,424	56.30	1,097,049	55.07	767,213	61.69
b	lower	152,522	13.02	211,701	16.40	327,277	20.17	406,255	21.75	395,382	19.85	197,419	15.87
ı	mixer	87,466	7.47	98,067	7.60	153,279	9.45	133,092	7.13	182,604	9.17	131,179	10.55
C	others	185,630	15.85	193,346	14.97	196,332	12.09	276,868	14.82	317,016	15.91	147,812	11.89
	Total	1,171,289	100.00	1,290,919	100.00	1,622,684	100.00	1,867,639	100.00	1,992,051	100.00	1,243,623	100.00

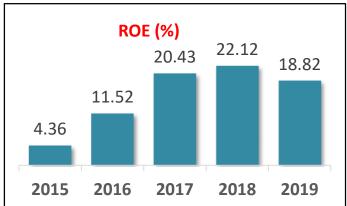
Consolidated income statement



Items	18Q1	19Q1	18Q2	19Q2	18Q3	19Q3	18Q4	19Q4	19Q1	20Q1	19Q2	20Q2	19Q3	20Q3
Revenue	430,567	394,512	476,365	505,098	510,410	535,690	450,297	556,751	394,512	248,663	505,098	493,929	535,690	501,031
Net Income	50,561	43,230	53,214	63,256	65,101	61,927	65,101	58,741	43,230	13,171	63,256	65,935	61,927	50,296

Currency	2018	2019	Difference	2019Q3	2020Q3	Difference
NTD/CNY	4.56	4.472	-1.93%	4.52	4.259	-5.77%

Dividend (NTD %)



Items	2017	2018	2019
EPS (1)	4.81	6.86	6.79
EPS (2)	4.81	6.28	6.79
Cash Dividend	3.01	3.8	4.5
payout ratio(%) (N1)	62.58%	55.39%	66.27%

EPS(1): Counted by average shares

EPS(2): Counted by year end shares

N1: Counted by EPS(2)

Dividend yield rate: by end of 2018 closing price (3.8/61.4=6.19%); by end of 2019 closing price (4.5/68.5=6.57%)

PE: by end of 2018 closing price (61.4/6.28=9.78); by end of 2019 closing price (68.5/6.79=10.09)

The 2020 interest rate is adjusted to 4.567164 per share due to treasury shares

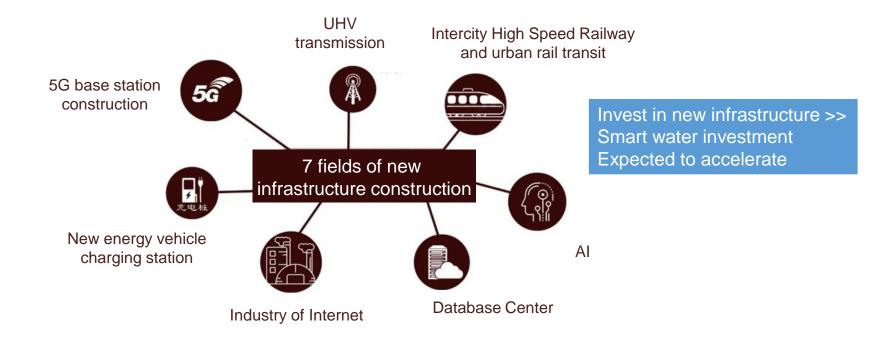




China's Environmental Policy

2011-2015	2016-2020	2021-2025	2026-2030	2030~
	Ten Water	Ten V	Vater	Ten Water
	Phase I	Pha	se II	Phase III
	1.Periodic improvement of water	1.Overall improvem		1.Overall improvement of ecological
	environment quality.	environment quality	/.	environment quality.
	2.The seriously polluted water has	2.Preliminary Resto		2.Ecosystem achieves a virtuous circle.
	been greatly reduced.	ecosystem function	•	
Twelfth Five	Thirteenth Five	Fourteenth Five	Fifteenth Five	
1. Improve the drainage network.	1.Improve the sewage collection			
2.Improve sewage treatment capacity.	system.			
3.Improve the effluent quality of	2.Enhance the capacity of sewage			
sewage treatment plant.	treatment facilities.			
4.Improve the harmless treatment of	3.Attach importance to harmless	To achieve	the ten ecologic	cal goals of water regulations
sludge.	treatment of sludge.			cal goals of water regulations,
5.Improve the reuse capacity of	4.Promote the use of recycled water.	Environme	ntal spending is	expected to continue to grow.
reclaimed water.	5.Initial rainwater pollution control.			
	6.Strengthening the treatment of black			
	and odorous water bodies in cities.			
	7. Strengthen supervision capacity			
	building.			
Investment amount: RMB 427.1 billion	Investment amount: RMB 564.4 billion			

China's Environmental Policy



China's Environmental Policy

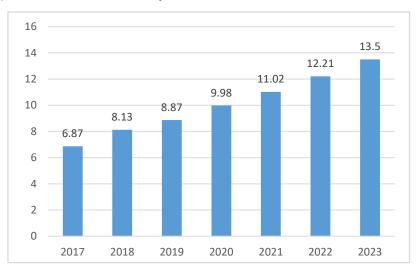


Industrial changes after covid-19

- Various disinfection increases
- Inspection frequency increased
- Increasing demand for online monitoring system
- Increased demand for personnel safety

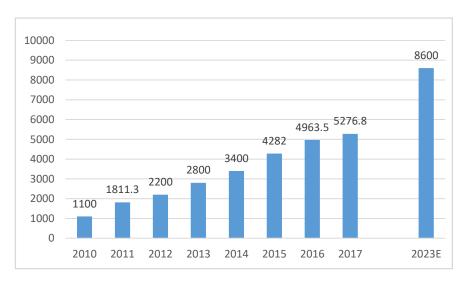
China's Environmental Policy

Statistics and forecast of China's environmental protection industry from 2017 to 2023



Unit: Trillion(RMB)

2010-2023 China's water industry market size



Unit: 100 million (RMB)

China's Environmental Policy



China's smart water market size and forecast







Core advantage

GSD business advantage to Maximize customers 'value

Product + Service

Full range of product scope & maintenance, Environmen tal Eng. Technology, Plant Design.

Sales Channels

32 sales points, providing prompt services (direct store + distributors) Brand

Well-known brand positioning for highend quality, costeffective. Team Power

Manageme nt talents + Environmen tal Eng. experts + R & D team Result: Obtained more than 98 patents.

Good Enterprise Management Platform
Corporate culture + business logic + management logic

- Sustainable
- Manageable
- Affordable
- Responsive
- Transparent



- Water/Waste
- Aeration
- Toxics
- Energy
- Resources

<u>B</u>io · <u>A</u>I · <u>I</u>OT · <u>E</u>quipment · <u>I</u>ntegrated

- Taking environmental engineering biotechnology, AI, and IoT as the core of innovation,
- Turning the accumulated knowledge of environmental engineering into growth momentum,
- Committing to upgrading of the environmental industry and creating new value.

TongJi&GSD microorganism R&D center



Environmental Steward / Third Party Governance / Operation / Supervision / Investment

ex: Advantech

The cooperation case of GSD and NCKU wins the Ministry of Science and Technology Special Award





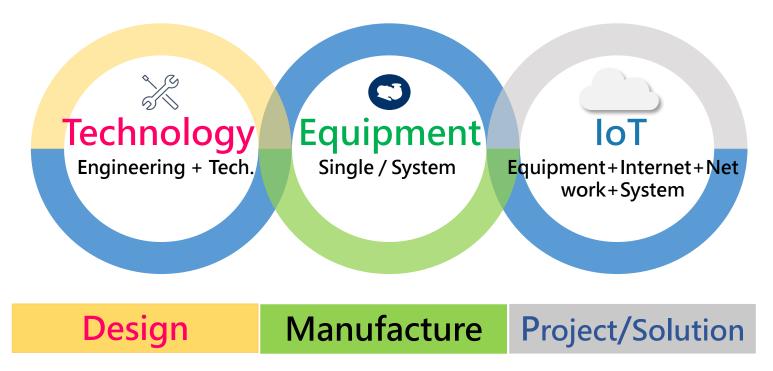


NCKU & GSD Water technology R&D Center

TongJi & GSD Microorganism R&D Center

Both sides invest in microbiology-related industry-academic cooperation

Core advantage





Consultant / Design Company
(Policies, Regulations)

- G S D
- Equipment Empowerment
- AloT Process Control

- Equipment Supplier

 (Function, Cost, Maintenance)
- Operating Company
 - (Cost, Benefit, Guarantee)
- Constructor / Contractor
 - (Technology, Competitiveness, Service capability)
- System Integrator

 (Localization, Rapid integration)

(Supervision, benefit)

業主

AloT

Water Resources AloT Management Platform

- Intelligent process remote control
- Equipment empowerment improves efficiency
- Preventive maintenance & active warning
- Intelligent aeration to save energy
- Accurate dosing reduces costs
- Trend analysis & whole observation

Complete full-cycle management of sewage sewer system Purpose

Equipment

Program

Strategy Empowerment

AloT Process Control

Objective

- Equipment life extension
- Operational optimization
- Energy and cost saving
- E Inspection

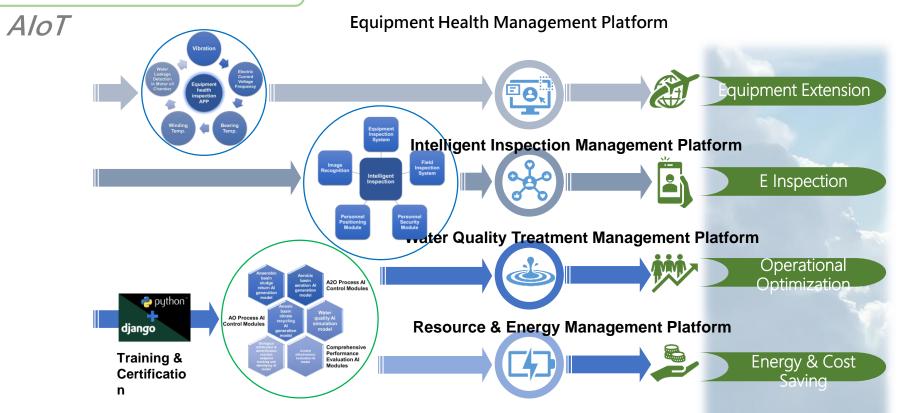


Operating Strategy

AloT **Equipment Management System** Submersible pump series On land pump Integrated sewage Mixing and Air bearings turbo flow propeller treatment equipment Integrated pump station management system River water quality Aerating oxygen monitoring Equipment input equipment Roots blower **SRP** management Management System **Empowerment** Sensor Submersible pump On land pump Solid liquid management separation Gateway Compact unit 反物器 及數報 取機 Aeration Bio Sludge Flocculation Treatment Advanced Oxidation Sedimentation **I.APP** SNdN Aeration ¹ **AloT Process** Treatment Biological Nitrification Adsorption Control Nitrate RN Sludge RN Step Feed Edge Data Collecting Aeration Edge Computing Biological Denitrification Biological Phosphorus

Intelligent Process Monitoring & Control Modules

Operating Strategy



Operating Strategy

Blower room of Tainan technology industrial zone





"Xia Baxian Pumping Station" Drowned and died

TVBS...

TVBS News Network 46k people following August 4, 2020 at 10:37 am

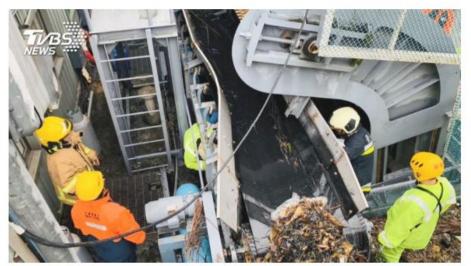
Li Caiying, Chen Shuxian, Liao Wenhan

2 comments





Typhoon Hagby caused many accidents. The Xiabaxian Pumping Station in Beitou, Taipei City today (8/3) afternoon, the staff of the Water Conservancy Department went down to dredge. They were suspected of drowning and losing contact. They had lost signs of life when they found people. In Taichung, it was suspected that the road was slippery in the rain. A male college student skidded on his bike and collided with a bus. He fell to the ground on the spot and was sent to a doctor and died.

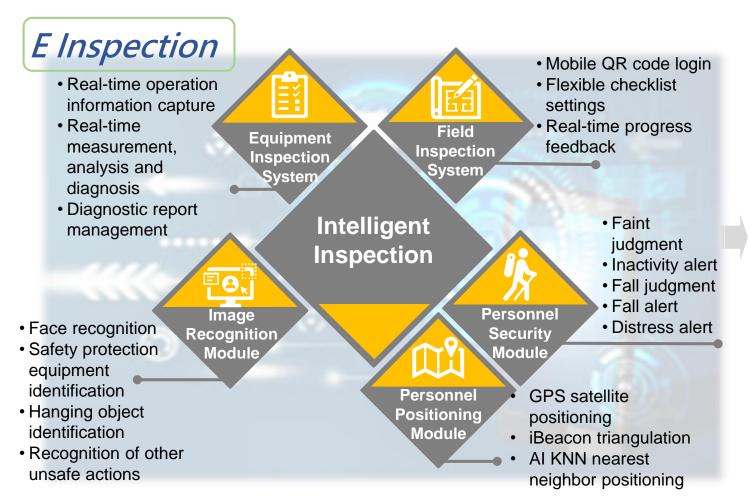


Picture/TVBS

The personal safety issue of inspectors

資料來源:

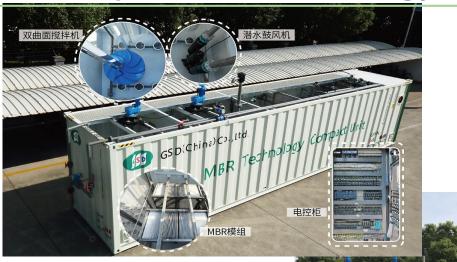
https://tw.news.yahoo.com/%E4%B8%8B%E5%85%AB%E4%BB%99 %E6%8A%BD%E6%B0%B4%E7%AB%99-%E6%B8%85%E6%B7%A4-%E6%B0%B4%E5%88%A9%E8%99%95%E6%8A%80%E5%B7%A5%E6 %BA%BA%E6%B0%B4%E6%AE%89%E8%81%B7-151920742.html



- Accurate detection failure factors hidden to arrange preventive maintenance in advance.
- Patrol inspection no longer just pass, but patrol according to items scanned.
- Precise positioning, toxic gas detection and safety risk control throughout full process to ensure personnel safety.
- Identification of identity/object/unsafe actions for quick detection of risk warnings.

GSD(China)Co.,Ltd





Intelligent Compact Unit Reactor for WWTP

Suitable for: urban and rural domestic sewage, General industrial wastewater and black & smelly rivers.



&mpact Unit

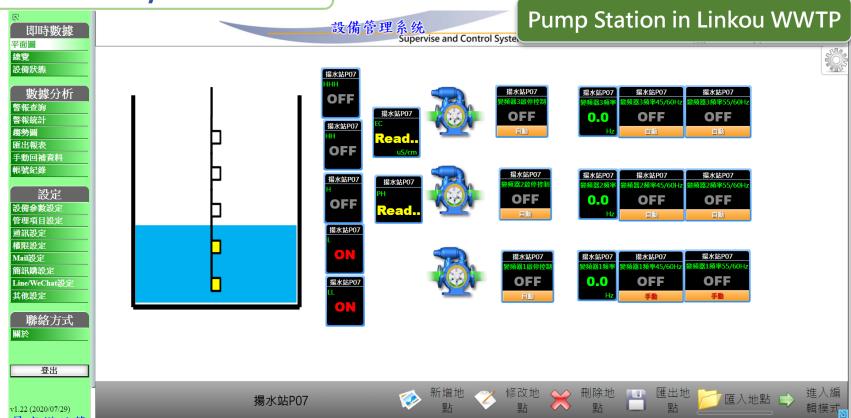
Equipment life extension





Operation optimization





Equipment life extension





Equipment life extension



Soil Thermal Desorption

Before the introduction of intelligent thermal desorption equipment, the owner controls the fire rate and feeding time according to experience, which results in great energy consumption (oil consumption), and the treatment effect may not meet the treatment standard.

After applying GSD solution

Problem Description

Through the customized platform, online intelligent remote control can be realized, and the efficiency and yield rate are improved.



ALBERTA

Reclaimed water



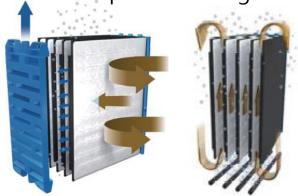
Linyuan Factory in Kaohsiung

Expansion of existing sewage treatment plant

On the basis of the original sewage plant, a new recovery system was added. It can handle 800 tons/day

Benefit

After installing the GSD's MBR (membrane bioreactor) module, sewage can be efficiently treated in the original space, eliminating the traditional need for a large amount of space and long-term maintenance costs.







Investment Plan

Based on China



Invest Taiwan



Invest Southeast Asia

Focus on..
Production Capacity,
Product Development

- Pinghu II plant construction
- Yangzhou plant construction

Focus on..
Strengthening
Competitiveness

- AloT
- Equipment Factory
- Engineering Consultant
- Operating Company
- Circular economy

Focus on..
Market Expanding

- Short-term: Building Channel
- Long-term: Capacity Development
- Method: Integrating Taiwan
 Resources.

Cooperate with diversified investment and plan to SPO in 2021



Disclaimer

- This presentation is a summary and assessment of the past, present and future operations of our company at the time of the presentation. It contains forward looking statements that will be affected by risks, uncertainties and inferences, some of which will partially beyond our control. The actual conclusions may differ greatly from these forward-looking statements.
- The information provided (including views on the future) does not express or imply that it is correct, complete and reliable; nor does it represent a complete exposition of the company, the state of the industry and the subsequent major developments.
- The expectation for the future in this presentation reflects our company's view so far. If there is any change or adjustment, our company is not responsible for reminding and updating at any time.

Thank you!

