

Absorbent Hygiene  
Materials<sub>(Diapers)</sub>  
Recycling Treatment,  
Restoration and  
Resource Reuse

Global Net Zero  
Emission is  
Imperative

Circular Economy, Low Carbon, Sustainable Development(ESG)



**YI CHUN**  
Green Technology

Yi Chun Green Technology Co., Ltd.



# Jonathan Chin

General Manager

Belgium Management School – University of Liege EMBA

\*Founder of Yi Chun Green Technology

\*Managing Director of Cherubim Alloy Industry

\*General Manager of Yi Chiu International Development

Other Innovative Industry | Net Capital : 100,000,000NTD | Denomination per Share 1NTD

Yi Chun is the **FIRST** company engaged in the recycling and reuse of used absorbent sanitary materials (used diapers), factory-made defective products and related scraps.

Yi Chun formulated a complete recycling and reuse plan, aiming to reactivate the end points of various wastes, linking the upstream and downstream of industrial chains, and demonstrating various cases of restoring and reuse of raw materials.





Sustainable



Development





Convenience of living  
generates massive quantity  
of waste poisoning our  
planet





Current waste  
treatment  
method

# Incineration and Landfill


Difficult to burn, Increase carbon emission

Environmental pollution, Takes more  
than 400 years to decompose \*

Materials that can be recycled and reused gone to waste

\* Quoted from 「 Commonwealth Magazine 」





Taiwan produces about 1300 tons of waste diapers each day,  
which occupies an entire incinerator

(Equivalent to the processing capacity of Beitou incinerators)

70-80%

of garbage produced from  
old age home / health care  
center

According to statistics, general garbage  
accounts for about 20% to 30%

are waste diapers

\* Own Statistics





# High Heating Value


( Plastic -30%, Paper pulp -32% )

# Difficult to burn

( SAP -32% )

Frequently excluded from incineration process



A close-up photograph of a dead bird, possibly a booby, lying on a dark, textured surface. The bird's head is turned to the right, and its long, pointed beak is filled with a large quantity of small, colorful plastic beads in various colors including red, yellow, blue, and white. The bird's feathers are dark and appear somewhat matted. The background is a dark, rough, and uneven surface, possibly a rock or concrete.

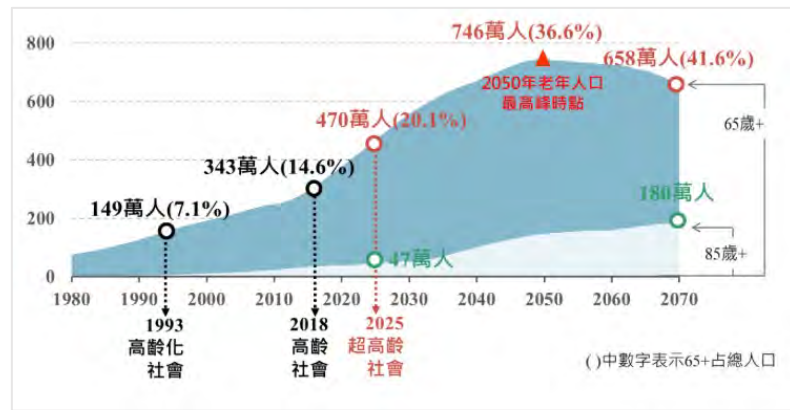
**Improper disposal of waste causing  
environmental pollution.**

**Like marine debris, heavily affecting the ecology**

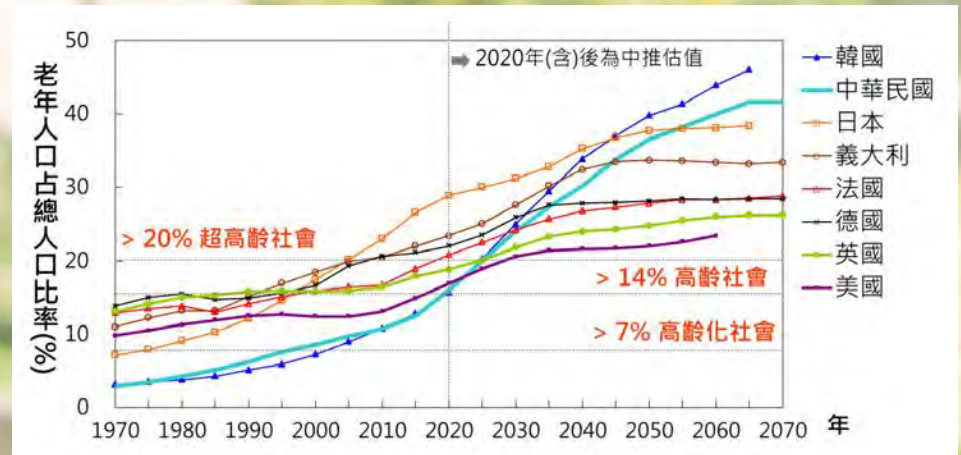
SAP in waste diapers that are not properly disposed are like  
**MICROBEADS** which heavily affecting the environment and  
ecology



# Global High Ageing Society Structure



Time laps of population aging in Taiwan



The ratio of the elderly population to the total population in major international countries



Yi Chun Green Technology Solution

Waste diaper restored to

three main

**RAW MATERIAL**

and REUSED



PLASTIC



Paper Pulp



SAP



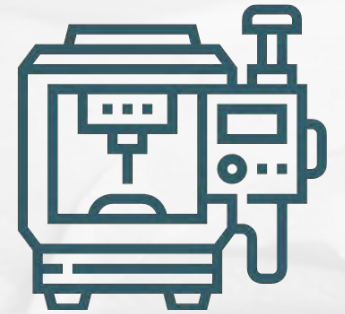
# Exclusive Patented Technology



1 Wash and Sterilize



2 Shredded



3 Material restored  
and refined

Water used in the process are  
**recycled** through a patented process

**Low energy consumption** by utilizing  
enzyme decomposition and sorting by means of  
physics to separate raw materials.

Odor treatment

Water recycle  
treatment

Impurity separation

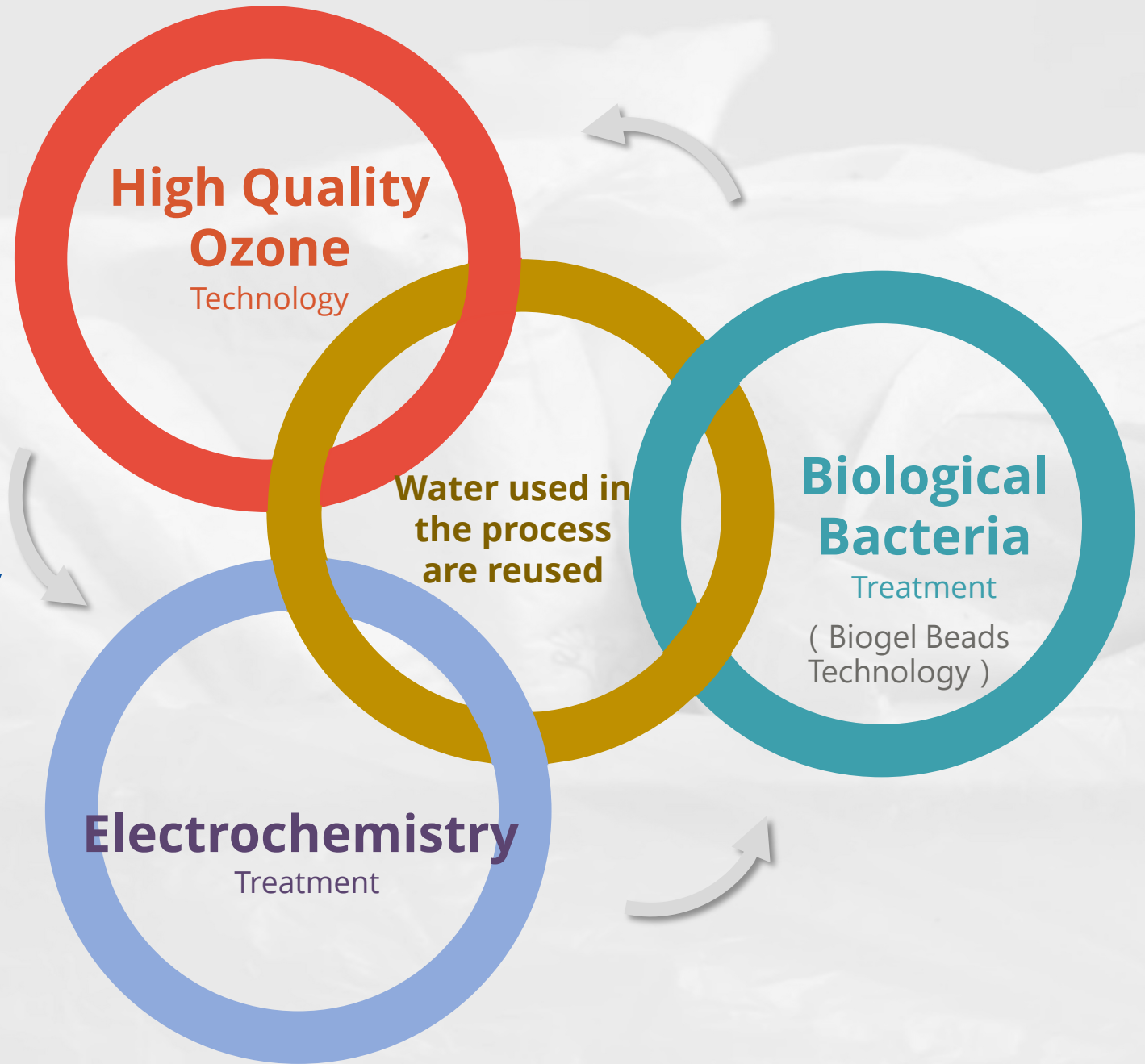
Material Purification



Water used in the  
process are recycled



Reuse Technology







## High Efficiency

Landfill takes 400 years and more  
to decompose

Yi Chun requires only  
1 hour



## Low Energy Consumption

Sorting by means of physics to  
separate raw material

Producing reused raw  
material and sold on the  
market



## Low Pollution

Precise method to handle  
resource and materials

Recycle, Environment  
Sustainability Model



Estimated **0.56** tons of CO<sub>2</sub>e  
can be reduced by treating each ton  
disposable diapers

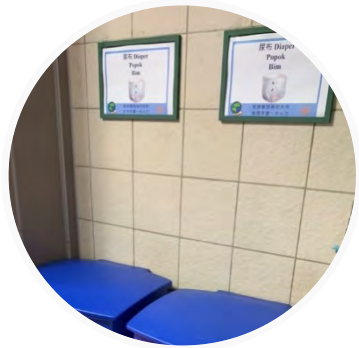




 Household waste



Nursery Center



Defect  
Product



old age home /  
health care center

❗Expired or Scrap



# Recycled Plastic and Application

- Recycled materials have been certified by the Plastics Research Center, and various applications of recycled plastic pellets
- If it is in the form of mixed plastic material, it can be used in mixed plastic applications (plastic wood, pallet)
- After purification, can be applied to blown film related products (packaging bags)





# Recycled Paper Pulp and Application

- Recycled paper pulp is long fiber white pulp
- Can replace the use of white pulp in the paper industry
- Extend to all kinds of non-skin-friendly consumer paper (industrial paper, carton, etc.)
- Various types of white pulp application requirements





# Recycled SAP and Application

- Can be restored to original form of SAP, and can be applied in industrial applications
- SAP characteristics used in various industrial applications such as water retention, chelating agent (wastewater treatment process)



The super absorbent resin in the waterproof sealing strip has the expansion characteristics to fill the engineering gap and prevent water from infiltrating the structure.



Chelating agent  
(wastewater treatment process)





# Recycled Plastic Pellet



Cloth Hanger  
Fast Fashion  
Accessories

衣架  
快時尚配件



包裝袋  
Packaging  
Bag



Recycle Bin  
回收桶



傢俱用品  
Household  
Items

All walks of life cooperate in various scenarios and industry application development.

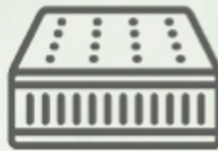
# Recycled Paper Pulp



書寫紙  
Writing Paper



連續抄紙  
Paper Rolls



Stuffing  
Cotton  
填充棉



貓砂  
Cat Litter

Professor Peng Yuanxing, Department of Forestry, National Chung Hsing University Assist various downstream applications such as docking specification identification and verification.

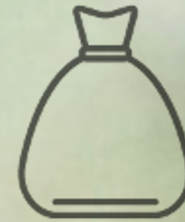
# Recycled SAP



園藝應用  
Gardening Application



寵物尿墊  
Pet Pee Pads



防洪袋  
Flood Bags



保冷劑  
Coolant Pack


Cooperative development from all walks of life, for agricultural water saving, industrial applications, etc.



MOEA (Ministry of Economic Affairs, R.O.C.)

# Defect Diaper Recycle Reuse Project

Partnership Case

 **Kimberly-Clark** Taiwan  
金百利克拉克

The reuse rate of waste  
resources before consumption  
reaches

# 99.4%

Recyclable per ton



0.305ton

PLASTIC



0.34ton

Paper Pulp



0.35ton

SAP





EPA (Environmental Protection Administration, Executive Yuan, R.O.C.)

# Household Waste Diaper

## Recycle Reuse Project

Partnership Case



富堡公司  
FUBURG



桃園市政府環境保護局

# 93.8%

The reuse rate of waste resources after consumption reaches

Total Received :  
3,022 kg



405kg

PLASTIC



366kg

Paper Pulp



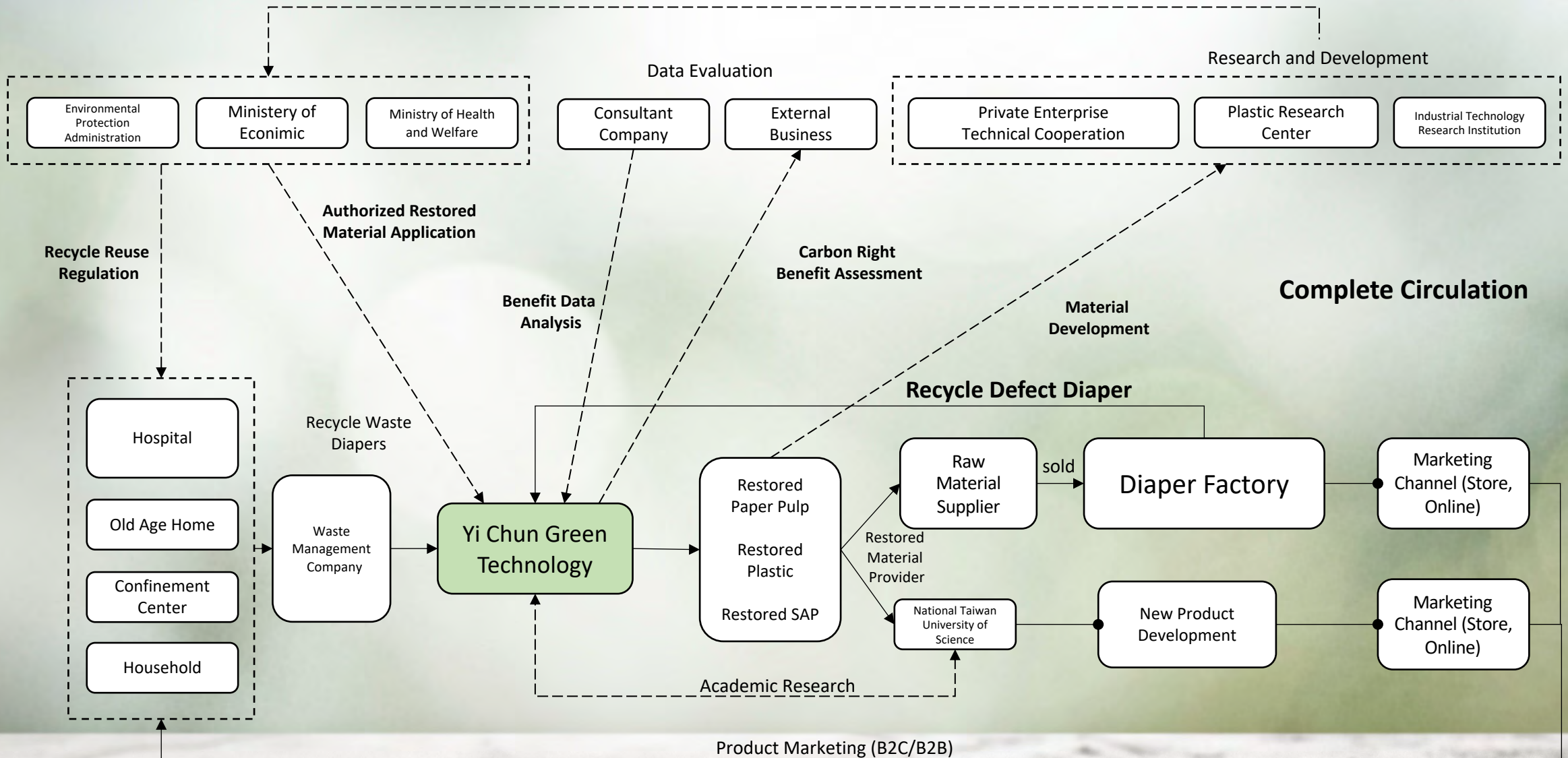
479kg

SAP





# Diaper Recycle and Resource Circulation







How companies  
reach a 50%  
reduction in  
emission by 2030



# Patent Status

Application Category	Patent Name	Certificate Number	Announcement Date	Country	Inventor	Patent Ownership
Invention Patent	Water Absorbent Article Recycling Process and Recycling System	I630959	2018/08/01	Taiwan	Bruce Wu ( Chief Technical Officer )	Yi Chun Green Technology
New Patent	Water Absorbent Article Recycling System	M557141	2018/03/21	Taiwan	Bruce Wu ( Chief Technical Officer )	





# 中華民國專利證書

發明第 I630959 號

發明名稱: 吸收性物品回收方法及回收系統

專利權人: 益鈞環保科技股份有限公司

發明人: 吳倍任

專利權期間: 自20

上開發明業經專利權人

經濟部智慧財產局 局長

洪淑敏

中華民國 108 年 6 月 20 日 (換發)



注意: 專利權人未依法繳納年費者, 其專利權自原繳費期限屆滿後消滅。



# 中華民國專利證書

新型第 M557141 號

新型名稱: 吸收性物品回收系統

專利權人: 益鈞環保科技股份有限公司

新型創作人: 吳倍任

3年12月29日止

經濟部智慧財產局 局長

洪淑敏

中華民國 108 年 6 月 20 日 (換發)



注意: 專利權人未依法繳納年費者, 其專利權自原繳費期限屆滿後消滅。

Both raw materials and products are income, and the production process is carbon right

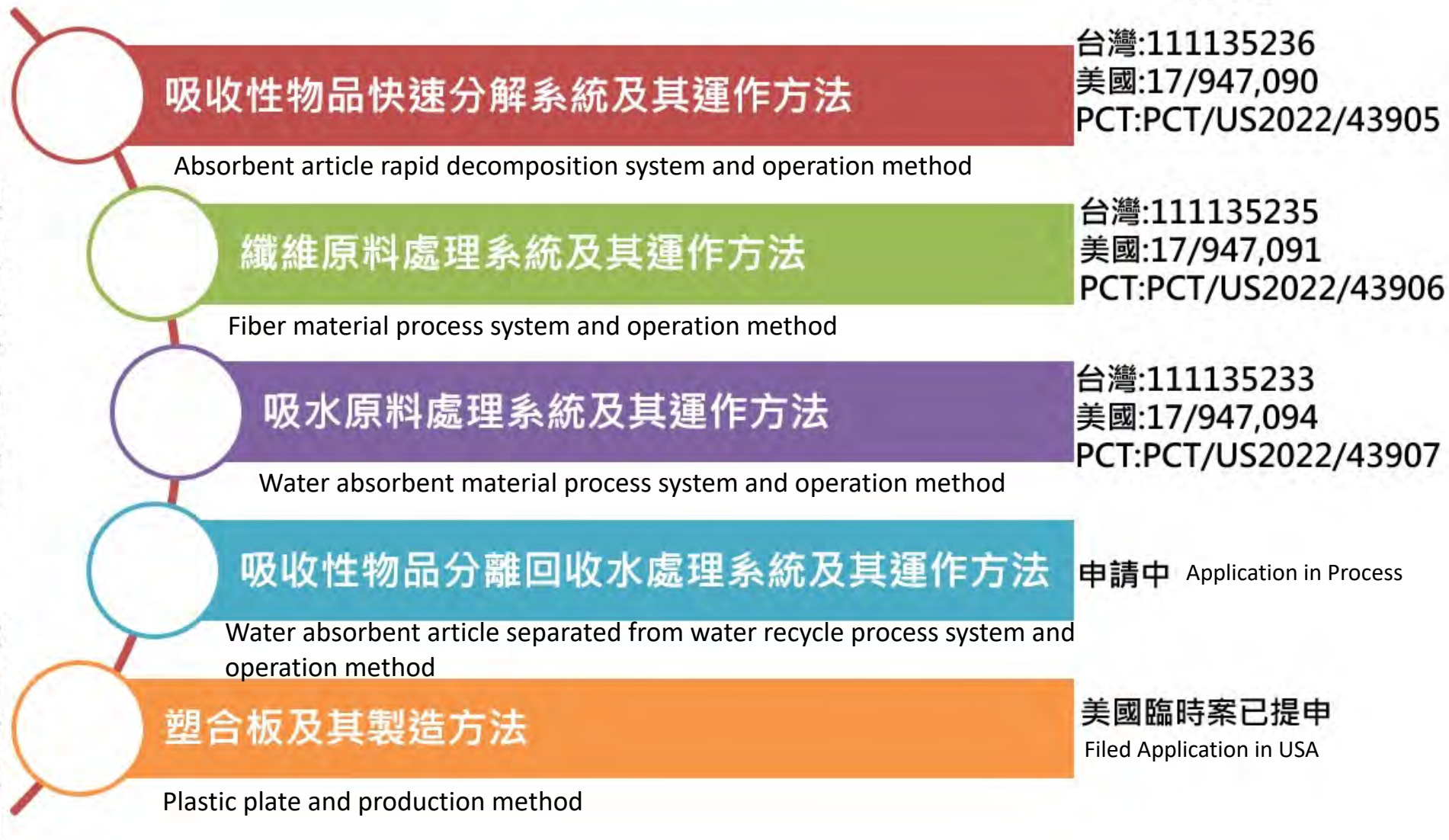


# Production Process Patent Layout

申請號 Application No.

Production  
Process  
Patent

製  
程  
技  
術  
端  
專  
利





















Product  
Patent

產  
品  
端  
專  
利



# Global Industry Analysis

	Yi Chun	Knowaste ( USA )	Total Care System ( Japan )	Super Faiths ( Japan )	Fater Smart ( Italy )	Diaper Recycling Technology ( Singapore )
Waste Diaper	 Can Process	 Can Process	 Can Process	 Can Process	 Can Process	 Cannot Process
Defect Diaper	 Can Process	 Cannot Process	 Can Process	 Can Process	 Can Process	 Can Process
Recycle Effect	 Restore Recycle	 Downgrade Recycle	 Downgrade Recycle	 Downgrade Recycle	 Restore Recycle	 Restore Recycle
Economic Value	High Price Raw Material	Low-margin processing plant	Low-margin processing plant	Low-margin processing plant ( No Washing, High Impurities )	Low-margin processing plant ( No Washing, High Impurities )	Low Market Size





ITALY

12:41:47

Material recycled and wide range of application



大愛

ITALY

12:41:53

Material recycled and wide range of application



Other International cases process without removing manure



# Yi Chun Low Carbon Diaper Recycling Center Development Path

2020

## Construction of Demo Plant

Complete construction of Dayuan demo plant  
Define recycling execution standard  
Implementation of various pilot programs

2022

## Approval Letter / Launched Pioneer Stock Board

Industry Bureau case reuse approval letter  
Completion of the EPA urban waste diaper pilot program  
Initiate internal audit and internal control, introduced PSB

2023

## LuZhu Plant Business in Operation

By License Approval Schedule:  
Defect recycling line 2023/Q1  
Waste diaper recycling line 2023/Q3



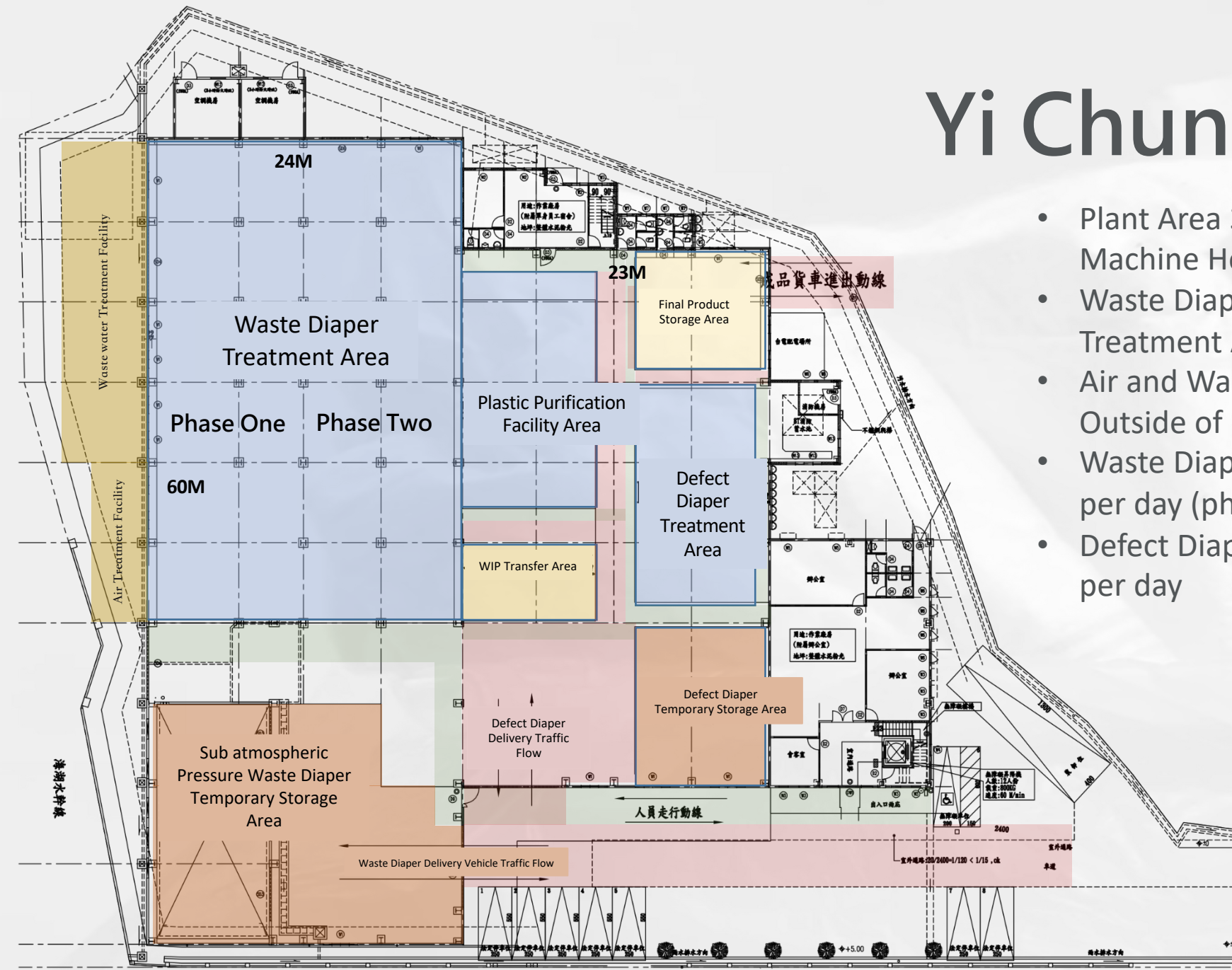


Yi Chun Green Technology – Luzhu Plant (Land 6600m<sup>2</sup>)  
Plant Area 3300m<sup>2</sup>, Office Area 600m<sup>2</sup> (3 Storey RC Building)



# Yi Chun LuZhu Plant

- Plant Area 3300m<sup>2</sup>, Building Height 14m, Machine Height 6m
- Waste Diaper Treatment Area, Defect Diaper Treatment Area, Plastic Purification Area
- Air and Waste Water Treatment Facility Planned Outside of Plant
- Waste Diaper Treatment Area (36\*24m), 100ton per day (phase two)
- Defect Diaper Treatment Area (10\*18m) 10ton per day



- Raw Material Storage Area
- Treatment Processing Area
- WIP Transfer Area
- Final Product Storage Area
- Waste Water and Air Treatment Facility
- Vehicle Traffic Flow
- Pedestrian Traffic Flow



# Yi-Chiu Group — Make Way Management Philosophy

Yi Chiu Group takes "environmental sustainability" as its business goal. Over the years, we have been implementing various circular economy-related industries, such as reuse of waste oil products and waste glass. Constantly seeking environmentally friendly ways to sustain resources.

Following the privatization of the Taiwanese oil industry in the late 80s, Yi-Chiu Group emerged as the guardian of the environment. Environmental pollution and ecological damage persist. This is urgent issue that needs resolved. No one is doing anything about it, but we care!

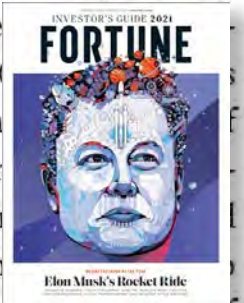
Yi Chun formulated a complete recycling and reuse plan, aiming to reactivate the end points of various wastes. Linking the upstream and downstream of industrial chains and demonstrating various cases of restoring and reuse of raw materials.

Achieving environmental sustainability and restoring precious resources is our mission.



Chia-Hung Chin, Chairman & Founder, Yi-Chiu Group.  
Jonathan Chin, General Manager of Yi-Chun Group.

the innovative solution of recycling diapers, and pulling out core materials, notably fiber, for reuse. Fabu Green Technology on the other hand, uses the versatile light stone technology, created from recycled glass, to facilitate greening, agriculture, aquaculture, and even friendly civil engineering. Yi-Chiu Group is also moving into renewable energy. The magazine also highlights the power of the shareholders of Century Win. Hung also highlights the opportunity in Taiwan. He explains the







■ Thank you !

