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We are using recycled paper.

PREFACE

Imminent, formidable, and destructive are some adjectives to describe the impacts of global warming on Earth. Nature will ultimately strike back as storm systems, torrential rains, and unprecedented levels of heat claim thousands of casualties across the globe. While the world mourns the deceased, environmentalists and like-minded advocates will call for governments and corporations to take Environmental, Social, and Governance (ESG) actions to keep our planet green, carbon-free, and sustainable.

At the Earth Day Summit in 2021, participating countries reiterated their commitment to net-zero carbon emissions, which galvanized the private sectors to follow suit. Apple has pledged to reach carbon neutrality by 2030 while TSMC requests that its suppliers comply with ESG criteria. The same commitments have also been voiced by the manufacturing and service industries. Some European department stores have already replaced their shuttle buses with electric fleets.

As a stakeholder in the global green revolution, Taiwan is not only dedicated to producing green products, it also strives to make green management possible through innovative mindsets and technological R&D. The Bureau of Foreign Trade (BOFT), with assistance from the Taiwan External Trade Development Council (TAITRA), has established platforms for dialogues, provided consultancy and assessment services, and most importantly, helped Taiwanese companies connect with the rest of the world about green business opportunities.

The Taiwan Cleantech Landscape presents all the achievements Taiwanese companies have reached in the areas of “Built Environment,” “Retrots” and “Microgrid” This publication aims to demonstrate to the world that Taiwan can and will be a responsible stakeholder in the face of climate change.

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CHENG LOONG CORPORATION

正隆股份有限公司

clc.com.tw/en/

Recycling paper food containers

It invests in co-generation systems to enhance energy efficiency and develops various renewable energies, such as solar energy, in order to minimize dependency on petrochemical energy in the paper making process. First paper maker completely recycling food paper containers in taiwan realizing carbon and plastic reduction and developing green business opportunities.

Certification/ ISO 9001, ISO 14001, ISO 14064, ISO 22000, ISO 27001, ISO 45001, ISO 50001, TOSHMS

FGD RECYCLING INDUSTRIAL CO., LTD.

惠嘉電實業股份有限公司

fgd.com.tw/en/

Collecting a variety of industrial waste for treatment

Waste electronics and IT products recycling, removal and process. With our constant effort to this field, our ultimate target is to reduce the consumption of natural resources and alleviate the burden of our environment.

Certification/ ISO 14001, ISO 9001



F-SEASONS ENTERPRISE CO., LTD.

富雨洋傘有限公司

beo-chion.com/?locale=en

Recyclable umbrellas

Recyclable modular umbrella, recycle the scrapped umbrellas and put the umbrella parts to a new life cycle.

Certification/ ISO 14067

FUN LEAD CHANGE CO., LTD.

凡立橙股份有限公司

ecoco.xyz/en/hompage/

Smart recycling machine

Manufacturing the recycling machine of batteries and PET plastic bottle caps. The business model is allowed customers to rent the machine rather than buy it.



JIIN YEEH DING ENTERPRISE CORP.

金益鼎企業股份有限公司

jyd.com.tw/en

Electronic waste recycling and treatment

Mainly deal with electronic waste generated by the electronic industry, transforming e-waste to 99.99% pure gold, silver, palladium, platinum.

Certification/ ISO 9001, ISO 14001, ISO 45001

LCY CHEMICAL CORP.

李長榮化學工業股份有限公司

lcycic.com/lcy/en/

Sustainable petrochemical products

100% renewable plant-based sources, as a 100% alternative to petrochemical materials. Recycling of plastic waste as material. Recycling and reuse of thermal energy.

Certification/ ISO/IEC 17025, ISO 9001

LIBO COSMETICS CO., LTD.

麗寶化粧品股份有限公司

libocosmetics.com/en

Cover and base made of 100% rABS recycled plastic

It keeps working hard to create innovative sustainable solutions with lower environmental impact of the packaging. A new line of post-consumer recycled (PCR) cosmetic packaging has released.

Certification/ C-TPAT

LONGCHEN PAPER & PACKAGING CO., LTD.

榮成紙業股份有限公司

longchenpaper.com/Lcpc_new_EN/main_index_en.asp

Low carbon papermaking and recycling

Low carbon papermaking business (79.6%): containerboard, linerboard(carton cardboard), medium(corrugated paper).

- Eco packaging business (19.0%): corrugated board, corrugated boxes.
- Energy and resource recovery and reuse (1.4%): procurement and sale of waste paper.

Certification/ OHSAS18001, FSCTM CoC, ISO 9001, ISO 14001

MACROHI CO., LTD.

美科實業股份有限公司

macrohi.com/

Recycling container

The first beauty product company to develop sustainable operations and has obtained several product certifications, such as Carbon Footprint Taiwan EPA, BS8001, SEAL AWARDS, and GoldenBoat Awards, etc.

Certification/ [cradletocradle](#), [Green Product Award](#)

MINIMA TECHNOLOGY CO., LTD.

銘安科技股份有限公司

minima.com/

Compostable polymer tableware

It offers food grade biodegradable resin compounds for blown film, sheet film, paper coatings, and injection molding. The resins are made into plastic bags, tableware, packaging materials.

SEE GREEN INDUSTRIAL CO., LTD.

旭聚企業股份有限公司

seegreen.com.tw/Eaboutus.html

Rubber or other industrial waste recycling

Industrial waste treatment and recycle: when the foam material has leftovers or wastes, it can be repeatedly added and recycled, so it not only saves the cost of waste disposal, but also allows the residual value of these wastes to be utilized, achieving the concept of waste reduction and sustainable management.

Certification/ ISO 9001, ISO 14001

TEX YEAR INDUSTRIES INC.

德淵企業股份有限公司

texyear.com/

Establishing the green platform strategy

Starting out the business with "adhesives", Tex Year has been committed to the entire chain of business operations including voluntary research & development, manufacturing processes, and marketing eco-friendly Tex Year® hot melt adhesives and 3 SECONDS® super glue.

Certification/ BRCGS, DIN CERTCO, EN-13060, CE ClassIIB

USI CORPORATION

台灣聚合化學品股份有限公司

usife.com/USIEnHome

Functional coating

Waterborne sun-shielding coating which can prevent conduction of thermal energy into the tanks, resulting in reduced water-spray cooling frequency. The USI sun-shielding coating is capable of TSR up to 90% and blocks out a majority of solar radiation that would otherwise enter buildings.

Certification/ ISO 50001, ISO 9001, ViviOn™

WALSIN LIHWA CORP.

華新麗華股份有限公司

walsin.com/en/

Recycling and reuse of byproducts of stainless steel, wire, and cable production

Walsin Lihwa was established in 1966, is not only the leading manufacturer of wire & cable, stainless steel, and resources business. It mitigate operating impacts on the environment by effective energy management, energy saving, carbon reduction, and pollutant emission control.

Certification/ ISO 9001, ISO/IEC 17025, BASEC, SASO, IATF 16949

YIDA LIYAN CO., LTD.

益大理研股份有限公司

soya.tw/index_en.php

Bean dregs recycling

It uses only non-GMO soybean and produces vegetarian food products without adding any preservatives.

Certification/ ISO 22000, HACCP

ABERDEEN DECORATION COMPANY LIMITED

亞伯丁股份有限公司

aberdeco.com/en/

Stone-like texture experts

It offers a variety of customized services and meet the needs of stone-like applications for different materials. The beauty of granite is reproduced in the most eco-friendly way.

AUO ENVIROTECH INC.

友達宇沛永續科技股份有限公司

u-fresh.com/en



Climate change mitigation and adaptation solution provider

Provide climate change mitigation and adaptation solutions:

- Water treatment technology, equipment and Engineering Procurement Construction (EPC).
- Facility management & control system, high- energy efficiency equipment
- GHG emissions management system (ACA, AUO carbon agent)
- Green product management system (GPARS)

FIRST METAL PRODUCTS INDUSTRIAL CO., LTD.

佛司特金屬有限公司

firstmetalproducts.com/web/en-us/index.html

Skylight vents, skylight smoke vents, skylight manhole vents

It offers products that combine lighting, ventilation, and smoke exhaust windows that are intended for a workshop or a certain part of the factory . In addition to maintaining normal ventilation, the functions of smoke exhaust windows are integrated.

Certification/ LCBA

FU SHENG INDUSTRIAL CO., LTD.

復盛股份有限公司

fusheng.com/

Heat recovery system

Providing energy saving solutions with environmentally friendly components.

Certification/ ISO 9001, ISO14001, OHSAS 18001

GREENFIL TEC LTD.

瀹能股份有限公司

eng.greenfiltec.com

Filter system design

Provides the airborne molecular contamination(amc) prevention control program to semiconductor and panel industries.

Certification/ ISO/IEC 17025

ROLLING GREENS CO., LTD

滾動綠自然科技股份有限公司

rollgreens.com/

RichFarm booster

Develops and manufactures eco-friendly and affordable Micro-Organism products, which helps farmers and organizations reduce the usage of fertilizer while increasing the yield rates and crop quality.



STRONG AND WISE MATERIAL TECH COMPANY

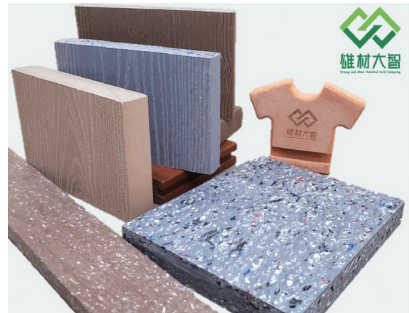
雄材大智科技股份有限公司

strongwises.com/#/

Outdoor decking board, indoor planks, and recycled PET

Turning recycled bottles and used garments into sustainable building material.

Certification/ VOOME



AU OPTRONICS CORP.

友達光電股份有限公司

auo.com/en-global

High performance module, bipv/bapv solution, all-round power plant solution, energy storage and management

It integrates software, hardware, cloud and service platforms to enter the diverse application market of field economy. And it provides diversified solutions in retail, healthcare, transportation, education, enterprise, manufacturing, and energy sectors to lead people into a brand new smart lifestyle.

Certification/ LEED, ISO 50001

DS ENERGY TECHNOLOGY CO., LTD.

鼎日能源科技股份有限公司

dsegom.com/en/

EPC

It offers resource and technology integration services in the solar energy system and offshore wind energy system.

Certification/ TÜV O&M

EEPV CORP.

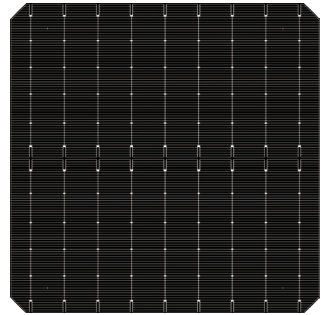
長生太陽能股份有限公司

eepv.com.tw/

**Mono PERC solar cell,
customization service, cell
laminate, flexible module**

EEPV adopt 5Whys approach to find the true root cause and fix the problem.

Certification/ ISO 9001, ISO 14001,
OHSAS 18001



E INK HOLDINGS INC.

元大科技工業股份有限公司

eink.com/

Smart home, electronic ink film

It is a variable transmissive film, which, when adhered to glass or plastic, allows for control of the light through the surface. JustTint utilizes a one-pigment system, but drives the ink in new ways versus other ink systems. In JustTint, the black pigments move to the side when a charge is applied to allow a transparent area of the capsule.

Certification/ Dark Sky

HI-VAWT TECHNOLOGY CORP.

新高能源科技股份有限公司

hi-vawt.com.tw/en/welcome.html

Vertical axis small wind turbines

Its wind turbines are specialized in the vertical axis type. Provide the hybrid integrated system within the wind energy and solar energy. It has production lines in Taiwan.



Certification/ TÜV Rheinland,

NEXTDRIIVE CO.

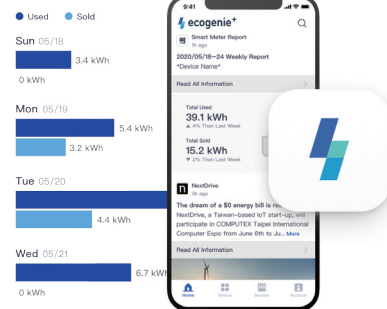
聯齊科技股份有限公司

nextdrive.io

Smart energy service solution

Through energy management devices to cloud data services, NextDrive provides one-stop solutions to the Internet of Energy (IoE).

Certification/ ECHONET Lite AIF



SUNPOWER ENERGY TECHNOLOGY CO., LTD.

日益能源科技股份有限公司

spetec.com.tw/

Renewable energy system integrator

Provides customers from designing, constructing to managing the solar projects.

SYNERGY SCIENTECH CORP.

興能高科技股份有限公司

synst.com.tw/en/

Advanced hybrid batteries (AHB), coin cell

It practices a management philosophy of innovation, diligence and teamwork. The core of the corporation's professional team consists of scientists and engineers with expertise in chemistry, materials science, mechanical engineering, chemical engineering, power electronics, product design, and quality management.

Certification/ ISO 14001

TAINERGY TECH CO., LTD.

太極能源科技股份有限公司

tainergy.com/index.asp

Solar energy application system

It has capacity of 500 MW in Taiwan and Kunshan plant is set to be 60MW. The combined capacity will be 560MW. The all-pervading application of solar products will definitely bring us a cleaner living environment.

Certification/ ISO 9001

WIADVANCE TECHNOLOGY CORPORATION

緯謙科技股份有限公司

wiadvance.com/en/

WiAdvance app market

Embedding AI, IoT, big data, and more innovative applications in manufacturing into the SaaS platform to solve digital transformation issues more quickly for small-medium enterprises.



About TAITRA

Founded in 1970, TAITRA is Taiwan's foremost nonprofit trade promoting organization. Sponsored by the government and industry organizations, TAITRA assists enterprises to expand their global reach. Headquartered in Taipei, TAITRA has a team of 1,300 specialists and operates 5 local offices in Taoyuan, Hsinchu, Taichung, Tainan and Kaohsiung as well as 63 branches worldwide. Together with Taipei World Trade Center (TWTC) and Taiwan Trade Center (TTC), TAITRA has formed a global network dedicated to promoting world trade.

Core Missions

- To assist Taiwanese businesses in developing international market.
- To collaborate closely with Taiwanese government in trade policy implementation.
- To provide business consultation service and connect international firms with Taiwanese partners.
- To assume the role of "Smart Integrator" - complement government policies, facilitate industry needs and develop new business opportunities around the world.

Main Services

- Global Marketing
- Taiwan Industry Enhancement Project
- Promoting the Service Sector
- Market Research and Publication
- Digital and E-commerce Marketing
- Gaining Trade Insights with Trade Data Analytics
- International Trade Institute
- Taiwan International Trade Shows
- Exhibition and Convention Venues
- External Relations



