2023

Invest Taiwan – Unleashing the Power of Infinite Possibilities

Reliability · Innovation · Integrity · Security Welcoming



May of 2023 https://investtaiwan.nat.gov.tw





01. Why Taiwan02. Investment Opportunities03. Investment Incentives04. Investment Services



Ranks #6 worldwide (and #2 in Asia) **Ranks #4 worldwide** in Economic Freedom in World Competitiveness 2023 IMD World Competitiveness Yearbook 2023 Global Economic Freedom Index Excellent Location Robust R&D Great Transportation Network Comprehensive IP Protection Reliable and Resilient Supply Chains Top-Notch Talent Welcoming Environment Integrated Industry Clusters

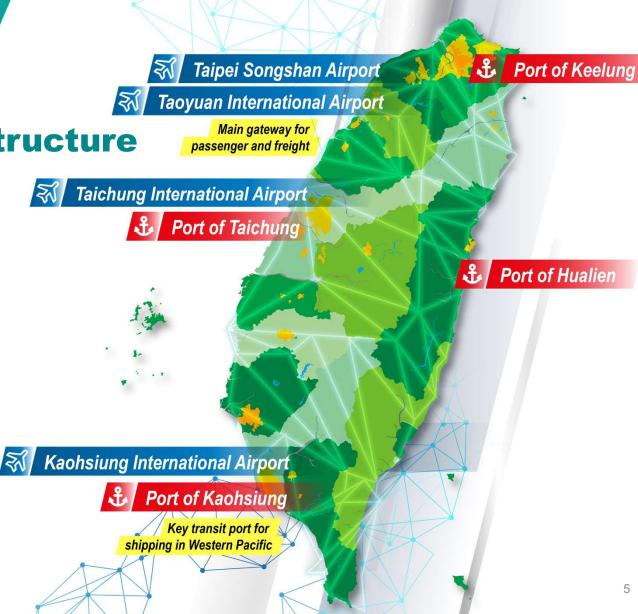
Northeast Asia East Asia Southeast Asia

Excellent Location

Located at the intersection of East, Northeast and Southeast Asia, Taiwan is the economic and trading hub for markets in China, Japan, Korea, and Southeast Asia.

Well-Developed 🛛 🕅 Transportation Infrastructure

- Complete transport network with 4 international airports and 4 international maritime ports.
- Major global logistics companies like DHL, UPS, FedEx, etc., have set up hubs in Taiwan.
- HSR, Taiwan Railway, and local transportation networks allow full access to all of Western Taiwan within a day.



Reliable and Resilient At Supply Chain

R&D Capabilities

- A global edge in the semi-conductor, IT and electronic component industries means top-notch technical support and services to foreign businesses.
- Reliable healthcare, abundant medical capacity, as well as a nation-wide NHI research database and Biobank provides a rich foundation for biomedical industry development.

Resilient Supply Chain

- Equipped with well-developed industry clusters closely integrated within the global supply chain.
- SEMI and ICT industries actively promote smart manufacturing technologies like automation and IoT for greater productivity and resilience.
- World-class IC foundry and biomedical CDMO (Contract Development and Manufacturing Organization) services offer flexible production even for small volumes.

Well-Developed Industry Clusters

Semiconductors | Digital Content | Biotech

Nangang Software Park

Hsinchu Science Park and neighboring parks

Semiconductors | Solar Power | Biotech

Central Taiwan Science Park and neighboring parks

National Defense Tech | Semiconductors | Solar Power | Biotech | Precision Machinery

Changhua Coastal Industrial Park

Metal Products | Metal Finishing | Recycling | Green Energy

Southern Taiwan Science Park and neighboring parks

Semiconductors | Solar Power | Environmental Tech | Automobile Parts | Precision Machinery

Industrial Zones near Kaohsiung City

Petrochemicals | Steel | Metal Processing | Precision Machinery | Semiconductors | EVs | Solar Power | Communications | Environmental Tech | National Defense Tech | Green Energy | Medical Devices

Industrial Zones near Pingtung City

Automobile Parts | Agricultural Biotech | Veterinary Vaccines

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INSTITUTE FOR INFORMATION IND

工業技術研究院

Collaborations between science parks and research institutions drive industry development and innovation

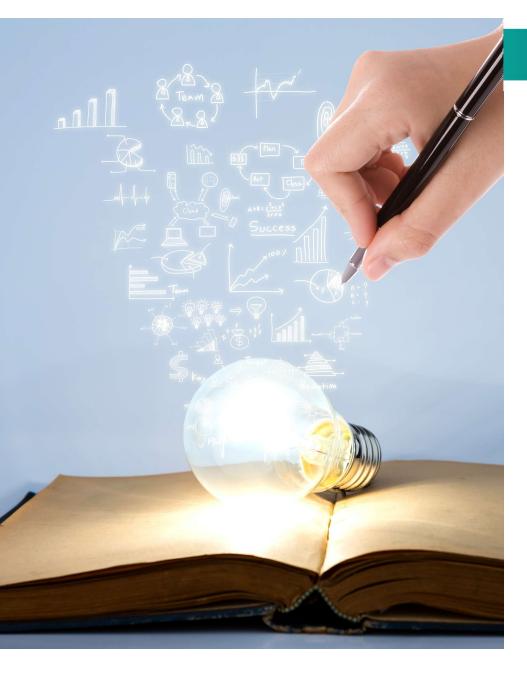


TTRI 紡織產業綜合研究所 Taiwan Textile Research Institute

8

Development Costor for Direct

Development Center for Biotechnolog



Comprehensive IP Protection

Robust IP Regime

The Commercial Case Adjudication Act and the Intellectual Property and Commercial Court Organization Act came into effect on July 1, 2021, appointing professional judges and inspection officers to resolve commercial disputes.

Patent Prosecution Highway (PPH) with a number of countries

Signed PPH agreements with the patent offices of US, Japan, Korea, the Netherlands, and Spain to accelerate patent examination.

Intellectual Property and Commercial Courts

Intellectual Property Rights Police (IPRP)

Globally Recognized Economic Freedom

Taiwan's IP regime is internationally recognized. In 2023, Taiwan achieved a rank of #4 among 184 economies in the Global Economic Freedom Index published by the US Heritage Foundation – our best ranking yet.



Top-Notch Talent



2022 IMD World Talent Ranking

- Ranked 19th globally and 3rd in Asia
- 1st in terms of R&D professionals per 1,000 people
- 3rd in terms of population aged 25-34 years with tertiary education degrees

Education Levels in 2022

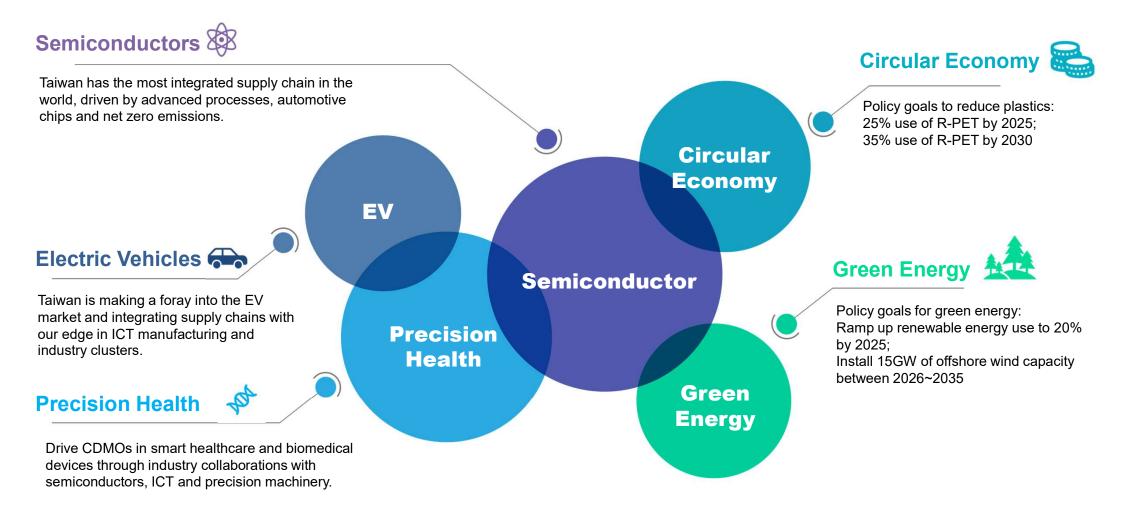
- 56.40% of the labor force holds tertiary degrees
- 9.87% of labor force holds graduate degrees

Welcoming Environment



- 3rd globally and 2nd in Asia for most livable country
- 1st globally for healthcare and welfare
- 2nd globally for quality of life
- 6th globally for salary and job security, as well as acceptance of other cultures

References: Inter Nations (2022/7/16) https://www.internations.org/expat-insider/2022/best-and-worst-places-for-expats-40242



Taiwan's Advantage & International Standing



Global market share of wafer testing and packaging No.1 Worldwide Global market share of IC design

No.2 Worldwide Total sales of the semiconductor industry in 2022



References: Industry, Science and Technology International Strategy Center of the Industrial Technology and Research Institute (2023/3)

Growth Momentum

Semiconductors

Taiwan leads the global semiconductor industry and drives greater market demand.

Semiconductor Materials

- Global market revenue grew by 8.6% to US\$69.8 billion in 2022, hitting a record high. Sales of semiconductor materials grew by 11.5% to US\$45 billion and revenue for packaging materials totaled US\$24.8 billion, an increase of 3.9%.
- The Taiwan market reached US\$16.17 billion in 2022, remaining the world's largest consumer of semiconductor materials.

Semiconductor Manufacturing Equipment

- Global sales have increased by 5% to US\$10.76 billion in 2022, compared to US\$10.26 billion in 2021.
- Taiwan has consistently ranked within the top 3 worldwide in this competitive market. Sales increased by 8% to US\$26.82 billion in 2022.

Emerging End-Use Applications

• Long-term projected growth and demand for innovation in key markets such as high-performance computing, 5G network, EV, and servers continue to drive the production capacity of wafer foundry.

References: Industry, Science and Technology International Strategy Center of the Industrial Technology and Research Institute (2023/3)

Advanced Processes

Automotive Chips

Net Zero Emissions

3 Drivers of Growth for Taiwan's Semiconductor Industry

• The government is encouraging the localization of key technology and production equipment for advanced processes, with the aim to make Taiwan a "Center for Semiconductor Advanced Processes" and "High-End Manufacturing Hub in Asia."

Semiconductors

- According to 2022 Yole Intelligence report, Taiwan's automotive semiconductor market has grown around 11.1% annually from 2021 to 2027, second only to computers and ICT.
- The increasing demand for Net Zero and ESG-related technology is driving green opportunities for semiconductors. Products should be designed for longer use and recyclability. Easy maintenance, reusable materials and manufacturing equipment should be taken into consideration for R&D.

Business Model

Semiconductors

Merck



Major German Company Announced Multi-Billion Semiconductor Mega Site

In 2021, Merck announced a 5-year, 17 billion dollar project to build the world's largest semiconductor materials Mega Site in Taiwan – introducing key production lines for advanced processes, which are expected to begin production in 2025.





Top Semiconductor Equipment Manufacturer in Japan to Build New Tainan Operations Center

TEL's Tainan Operations Center broke ground in November 2022. Construction is expected to be completed in the second half of 2024. The 2 billion dollar project is expected to create thousands of employment opportunities and add to Taiwan's robust semiconductor supply chain.

Recent Projects

ASML



Leading Dutch Manufacturer of Semiconductor Equipment to Build Facility for 2nm Wafer Equipment R&D

ASML announced plans to expand their facilities at the end of 2022, further bolstering Taiwan's advanced processes supply chain. The project will be the company's largest overseas investment yet, injecting nearly \$30 billion in phase one and with around 2,000 employees projected to move in.

IC Foundry No.1 IC Design No.2 LCD No.3

A Growing Semiconductor Ecosystem

High Production Flexibility Software and Hardware Integration



02 • Investment Opportunities

EVs

Taiwan's Advantage & International Standing

Software and Hardware Integration Drives Design Innovation

Highly innovative energy storage systems, energy control units and telematics for EV manufacturers.

Robust Supply Chains

Ranked 1st in IC testing and packaging, wafer foundry and PCB market; 2nd in IC design and substrates; and 3rd in panels. Taiwan will leverage it's highly integrated electronics supply chain to drive development of EVs, autonomous vehicle, and vehicular clouds.

Flexible Production & Manufacturing

Manufacturers of critical automotive parts offer higher flexibility production services, which allows for new cross-industry collaborations to meet the needs of the automotive industry.

EVs

Growth Momentum

Global EV Trend

The compound annual growth rate of global EV is expected to reach 29% in the next 10 years and total sales will increase from 2.5 million in 2020 to 31.1 million in 2030. EV penetration will over 30% by 2030.

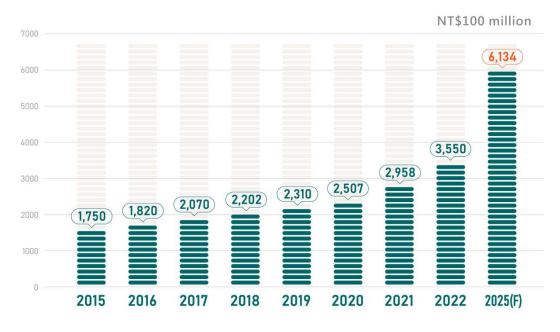
Largest Progress for Taiwan Automotive Electronics

Production capacity has grown 13% year-on-year over the last 5 years and is forecasted to reach NT\$600 billion by 2025. Automotive electronics are forecasted to account for 50% of total parts and components export. Taiwan companies are entering the automotive market, and we expect to see fruitful results in the future.

Ban on Gas-Powered Cars

With the approaching deadline for gas-powered cars and tightening carbon emission standards, many car manufacturers are augmenting EV investments. Not only are EV startups making progress, but traditional carmakers are also hastening their transformation – EVs are now a priority.

Output of Taiwan Automotive Electronics



References: Industry, Science and Technology International Strategy Center of the Industrial Technology and Research Institute (2023/11)

The output of the TW automotive electronics sector reached NT\$300 billion in 2021, and forecasted to double (NT\$600 billion) by 2025. The compound annual growth rate is 18%.

Business Model

- Most Taiwan businesses offer critical components (motors, charging equipment and electronic components) for SOM (system-on-module), with the potential to become Tier 1 suppliers. This will attract more investments from startups and international carmakers.
- More carmakers will enter the EV market. Taiwan's experience in chips, panels and center consoles can support domestic ICT companies to develop smart and innovative solutions. International carmakers may be more inclined to establish RD centers in Taiwan.
- Foxconn launches MIH Open EV Alliance as a standard platform for ICT and EV startups in order to reduce the RD cost of EV, and attract more foreign investment.



Recent Projects



OPTIMPL · EV

Enters NA school bus market w/ ARTC Taiwan

A joint venture set up in 2022 between the Automotive Research and Testing Center (ARTC) from Taiwan and USbased Optimal Intelligent Mobility (Optimal Group) aims to enter the North American school bus market and is expected to bring tremendous opportunities for Taiwan's self-driving supply chain.



EVs

NP

Builds Open EV ecosystem w/ Foxconn

NXP is working with Foxconn to design and develop safe EV and autonomous driving technologies. Backend testing and verification is also being developed in Taiwan to accelerate car manufacturing. Relevant investments in Taiwan are also being assessed.





Enters Japan EV market with Fukuta

A joint venture was set up between Fukuta and Chuo Kaseihin in 2022 to develop motors and reducers, with Fukuta in Taiwan managing 50% of production. By introducing the EV component supply chain to Japan, the project is expected to drive the domestic EV ecosystem.

02 • Investment Opportunities Precision Health

Industry Alliances and Value-Adding Clusters

Mature industry clusters in ICT, semiconductor, and biomedicine, as well as industry alliances, are creating important niches for the precision health industry.

Asia-Pacific Market Opportunities

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Medical expenditure is growing due to aging populations and economic growth in the Asia-Pacific region, making Taiwan the perfect location for access into Asia-Pacific medical markets.

An Important Industry for Global Connections

Taiwan's world-class ICT, semiconductor, and precision machinery industries create a favorable environment for developing chips for high-end medical devices, AI computing and big data (prevention, diagnosis, treatment and care). Access to the medical device market is facilitated through CDMO.



20 New drugs on the international market

BO High-value medical devices on the international market



02 • Investment Opportunities Precision Health

Growth Momentum



Smart Healthcare (prevention, diagnosis, treatment & care)

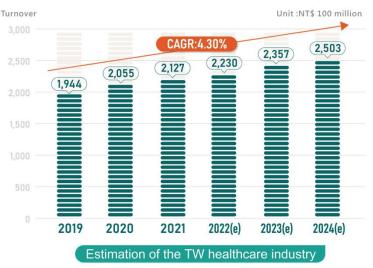
• Includes telehealth & medical information systems. Compound annual growth rate (CAGR) from 2021 to 2026 is estimated at 15.9%, and market size is projected to reach US\$373 billion by 2026.

References: Industry, Science and Technology International Strategy Center of the Industrial Technology and Research Institute (2023/11)

 The growth of the sector is driven by improving overall medical efficiency and personal health benefits. Sub-categories experiencing high growth momentum include tumor diagnosis, chronic monitoring, sleeping, and personal health management.

Bio-Medical CDMO

- A Frost & Sullivan report in February 2022 said the global Contract Development and Manufacturing Organization (CDMO) market reached US\$ 55.5 billion in 2022, and is projected to surpass US\$ 100 billion by 2025, with a compound annual growth rate of 14% higher than the 5.7% growth rate of the global pharmaceutical market.
- The Act for the Development of Biotech and Pharmaceutical has extended tax preferences to the end of 2031 and applies to biotechnology OEM, regenerative medicine, precision healthcare, and digital healthcare. Companies may choose to reduce the corporate income tax this year by 5% or by 3% over 3 years.



References: Biotechnology White Paper by Industrial Development Bureau, Ministry of Economic Affairs (2022/8)

Business Model

Precision Health



- The four major directions of smart medical care in Taiwan: electronic medical records and image transmission, hospital information security, telehealth care and value-added health data application.
- The six technologies driving innovation of the healthcare industry: artificial intelligence (AI), blockchain, cloud, big data, edge computing and 5G.
- With complete ICT and biomedical supply chains, we can work with international medical device suppliers to develop high-end or special CDMOs and enter markets. 23

Recent Projects



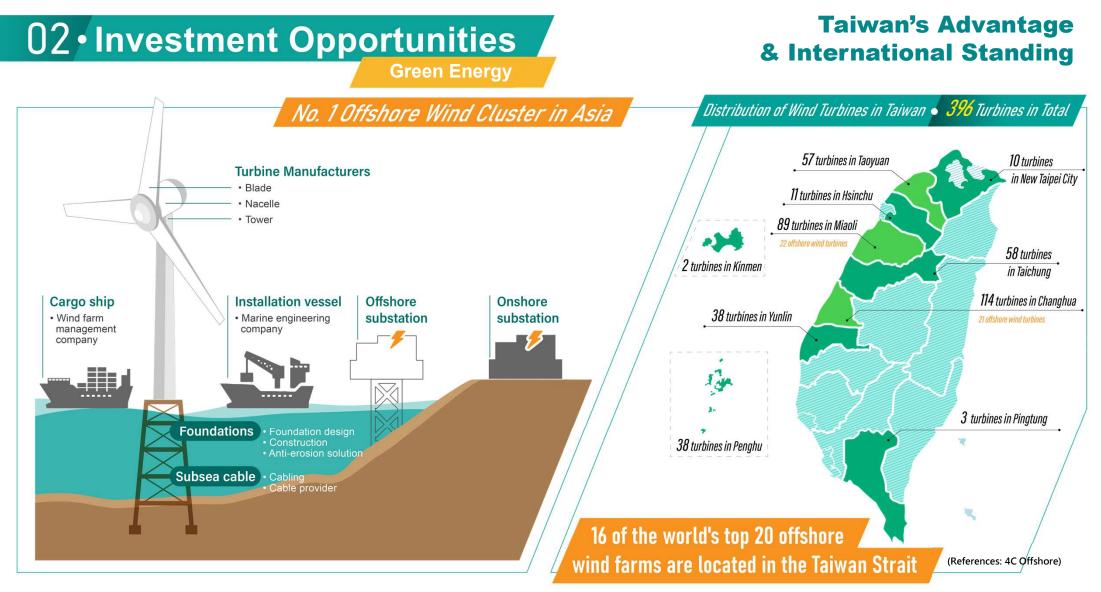
Intel's HPC and AI Center promotes smart healthcare

- Intel built the HPC and AI Center with Chang Gung Memorial Hospital in 2021 to provide high speed computing for medical AI, medical genetics, stem cells and oncology labs. The aim is to enhance smart and digital healthcare.
- In 2022, Taiwan collaborated with 18 companies and medical sectors to showcase the process and key achievements in assisting medical transformation. Efforts extended to countries such as India, the United Arab Emirates, and Vietnam, aiming to promote international business exchange and cooperation.



SHL Medical, the world-leading DDS solution provider, sets foot in Taiwan

- SHL Medical, one of the largest providers of the global drug delivery system, primarily manufactures autoinjectors. The Switzerland and US centers focus on design while the Taiwan plant offers product manufacturing, as well as talent cultivation through industry-academia collaboration.
- Products range from medical beds with air mattresses, copper indium gallium selenide (CIGS) solar cells to high-precision 3D positioning device.



Green Energy

Growth Momentum

Global Wind Power Market: Projected to reach US\$984 billion by 2030 with CAGR 6.3%

References: Allied Market Research, 2022



- * Phase II and Phase III vendor selection will take into account Phase I progress.
- * Phase II timeline is to be announced (TBA).

Business Model

02 Investment Opportunities

Green Energy

Taiwan as Green Energy Hub by 2025

Public Wind Farms Cooperate with energy companies and wind turbine manufacturers, such as investing in electric transport facilities

2025 Goals

Wind farm planning and operation

A2SEA, a joint venture between Ørsted and Siemens Gamesa

Onshore 886MW Offshore 5.6GW Energy storage development Battery materials and innovative technology (charging and discharging speed, higher safety), PCS development, integration of energy management system and development of recycled materials.

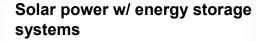
2025 Goals

Development of energy integration system

Cooperation with energy companies to develop smart grids, upper, middle and downstream integration of the energy storage industry to provide clean energy.

1.000MW stationary energy storage system





2025 Goals

Encourage installation of energy storage systems connected with solar generators via the FIT (feedin tariff) scheme to support nighttime power needs.

Expand industrial parks Adoption of the PV-ESCO model so vendors can lease rooftops without bearing installation costs

> Ground 12GW **Rooftop 8GW**

Recent Case

02 • Investment Opportunities

Green Energy



SIEMENS Gamesa



Taiwan Makes First Turbine Blade for a New Chapter in MIT Wind Power

In 2022, Vestas, together with its partner, Tienli, produced the first-ever turbine blade to be made in Taiwan – a goal that was achieved two years ahead of schedule.



Global Leader in Wind Power Makes Taiwan a Hub for Offshore Wind Power Export in Asia Pacific

Siemens Gamesa expanded the nacelle facility in Taichung in 2022 and has begin producing 73 14MW turbines, marking the biggest wind turbine contract for a single wind farm in Taiwan.

02 • Investment Opportunities Circular Economy

Taiwan's Advantage & International Standing



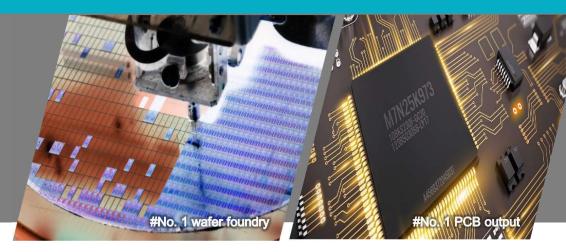
Plastic Recycling

Taiwan government is a long-term proponent

- Increase use of R-PET by 25% by 2025
- Increase use of R-PET by 35% by 2030

Precious Metal Recycling

Precious metal recycling and reuse for applications in functional materials and semiconductor membranes

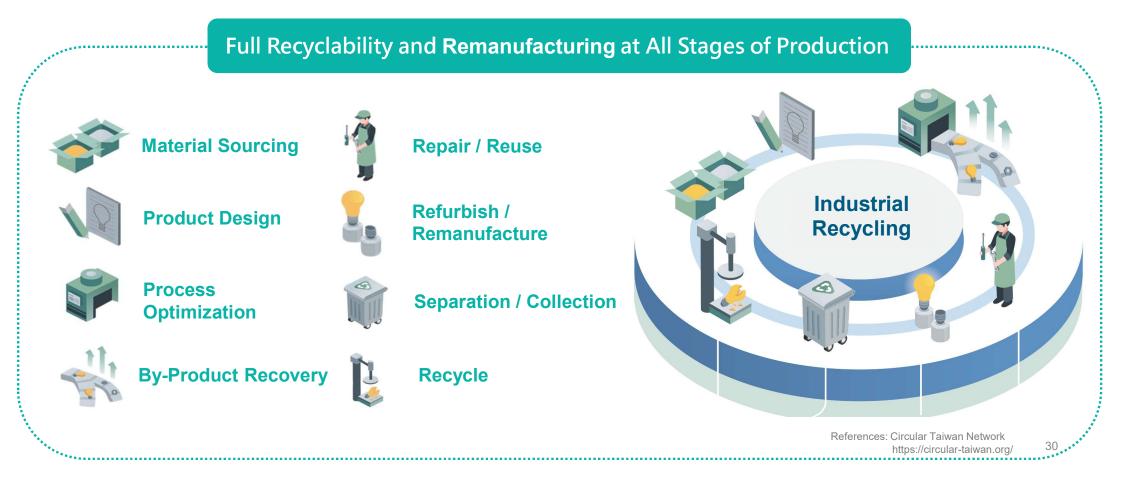


02 • Investment Opportunities Circular Economy

Growth Momentum

WEF announced its forecast in January, 2023 that circular economy output will reach US\$4.5 trillion by 2030.

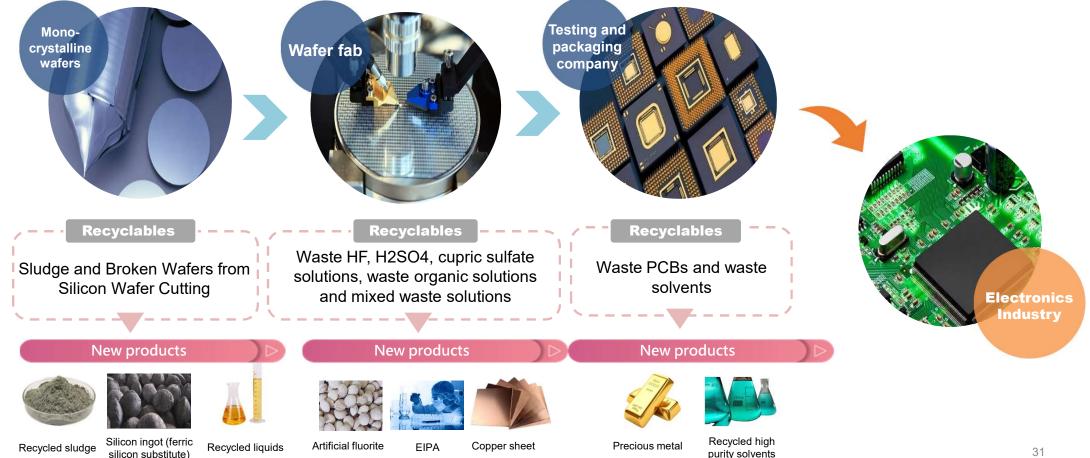
Key for the transformation to a circular economy: Industrial Recycling



Circular Economy

Business Model

Major source of semiconductor waste in Taiwan: Monocrystalline silicon wafer companies and wafer fab (70%), testing and packaging (20%), and others (10%)



02 • Investment Opportunities **Circular Economy**

Business Model

25% of Global Recycled Polyester Comes from Taiwan!

Taiwan functional textiles accounts for 50% of global market share and Taiwan outdoor functional textiles account for over 70% of global market share.

References: Taiwan Textile Research Institute (TTRI)

Taiwan Textile Research Institute

- Increase use of R-PET by 25% by 2025
- Increase use of R-PET by 35% by 2030 Eligible applicant will receive the Green Mark and preferable recycling rates.

Initial sorting **R-PET Circular Journey Recycling process Recycled PET pallets**

R-PET

Recycling through channels

Green products

References: MOEA/Industrial Information Platform of Circular Economy

Recycling logistics

Recent Case

33

Circular Economy





The First Privately-funded Renewable Energy Plant in Taiwan

TCE built WtE in Taoyuan in 2022, and construction is scheduled to be completed by 2025. Approximately 150,000 tons of SRF will be transformed to produce electricity and generate as much as 160 million kWh of renewable electricity.





Largest German Recycling Service Provider Makes Largest Overseas Investment in Taiwan

REMONDIS broke ground on a NT\$1.5 billion plastic recycling facility in Changhua's Fangyuan Industrial Zone in 2022. The facility is expected to be operational by December 2023 and process approximately 1,200 metric tons of plastic waste.

03 • Investment Incentives

Tax Preferences

Special Zone Benefits

R&D Subsidies

Rewards for Global Top Talents

03 • Investment Incentives

Tax Preferences



4

5

6

Income tax deductions for R&D expenses Up to 15%

For substantial investments with undistributed earnings Profit-seeking Enterprise Income Tax exemptions

3 Exemption from tariff for Import of novel machinery, device and equipment

Income tax deductions for investments in 5G / Smart machine / cybersecurity products or services Up to 5%

Investing in forward-looking innovative R&D and purchasing new machine or equipment Tax deductions of 25% and 5% respectively for the year

For patent and copyright fees Income tax exemptions

Tax deductions for biomedical R&D investment Up to 50%

03 • Investment Incentives RD subsidies

Global R&D Innovation Partner Program

Foreign enterprises on the establishment of R&D centers in Taiwan

Subsides are available up to 50% of total spending

Industrial Technology Foresight Research Program

Foreign companies for the development of advanced technologies may receive

Subsides of 40-50% of R&D development funding



General Tax Incentives

• Import tariff, commodity tax and business tax exemptions Raw materials / fuels / materials / semi-finished goods / machinery

Zero business tax

Goods and services shipped abroad Raw materials, fuels, materials, semi-processed goods and machinery procured from a tax zone

Free Trade Zones

- For enterprises who engaged in only preparatory or auxiliary activities in Taiwan, and handling with procurement, import, storage or transport in FTZ area, the sales income shall be 100% exempt from Profit-seeking Enterprise Income Tax.
- Exemptions from alcohol tax, tobacco health welfare surcharge, trade promotion service charge and harbor service fee.

Science Parks

- R&D subsidies up to NT\$10 million
- No more than 50% of total program funds



Retirement, health insurance and tax preferences

- · Reduce tax over 3 years for special professionals
- Relax restrictions on applications for national health insurance
- Better retirement protection

Relax restrictions on residence permit of parents, spouses and children

- · Approve work permit for adult children
- Relax restrictions on permanent residency of spouses and children
- Extend family visit visas for direct relatives

Relax restrictions on work, visa and residence

- 4-in-1 Taiwan Employment Gold Card
- Employment seeking visa
- · Issue work permits for foreign professional artists

Defer tax for technology stocks and employee stock options

- Exclude from taxable income earned from shares of the year
- Tax depends on the acquisition or transferring price, whichever is higher, while making transfers

04 • Investment Services

One-stop Service Interdepartmental cooperation and resource connection

46 13%

Visitors activity sta

Land & Property Services Land acquisition and evaluation service

Rapid Response (1 day) Online and Offline services

InvesTaiwan

Services

- · Provide customized services for your projects
- Search for appropriate land and help with applications for investment incentives
- Combine government and private professional resources to offer quality service
- Coordinate with central and local governments to accelerate the application of investment projects
- Provide investment, tax and legal consultation service
- Provide talent recruitment information



Investment Advisory Service Successful Investment Care and Support



Significant Position in the Global Supply Chain

- Taiwan is located at the heart of the Asia-Pacific region, with efficient supply chains, comprehensive industrial clusters, and innovative capabilities. We closely collaborate with enterprises from Europe, the United States, and Japan, forming an international ecosystem.
- From semiconductors to ICT industries, precision machinery to the Internet of Things, and even the potential of the green energy industry and the strength of biotechnology and medical care, Taiwan has emerged as the most reliable, efficient and secure partner in the global supply system.

Multinational Corporations Continue to Invest in Taiwan

- International semiconductor equipment and material giants, such as Dutch EUV equipment manufacturer ASML, American Applied Materials, and American multinational materials corporation Entegris, have successively established manufacturing and research and development capabilities in Taiwan. By leveraging Taiwan's local manufacturing strength, they are enhancing the ecosystem of the semiconductor industry in Taiwan.
- International cloud service providers, such as Google and Microsoft, have also set up data center hubs in Taiwan, storing critical computing equipment and customer data locally. This strengthens Taiwan's geopolitical value as a data hub in East Asia.

Foreign Companies Affirm Taiwan's Investment Environment

- According to the "2023 Business Climate Survey" released by the AmCham Taiwan, nearly 90% of its members plan to maintain or expand investment in Taiwan.
- The German Trade Office released the "2022/2023 German Business Confidence Survey" report, which showed that up to 96.7% of German businesses expressed their intention to continue staying in Taiwan and have confidence in the economic environment of Taiwan.

Summary

Taiwan is a Risk Manager

- Despite ever-present risks, we have and will never create more risks, but rather will engage in responsible risk management. Taiwan will stand alongside all democratic nations and work to resolve these risks together.
- The arguments regarding Taiwan's dependence on China and the idea of "Taiwan plus one" have been excessively exaggerated and diverge from the trut. Taiwan will make every effort to maintain peace in the Taiwan Strait and become a key stabilizing force for regional security.

Peace in the Taiwan Strait is a Global Consensus

- The Taiwan Strait issue is of great importance to international security and prosperity and must be resolved peacefully. No party should unilaterally change the status quo through non-peaceful means.
- On May 22, 2023, the G7 Hiroshima Summit issued a joint statement reaffirming the importance of peace and stability in the Taiwan Strait. It strongly opposes any unilateral attempts to change the status quo through force or coercion. This statement will help reduce risks in the Taiwan Strait.

Gradual Reduction of Dependency on China

- Measures such as the Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan have been implemented to gradually reduce economic dependence on China. As of 2023, investments totaling nearly NT\$2.4 trillion have been reviewed and approved.
- By promoting the New Southbound Policy, Taiwan has strengthened diverse exchanges and cooperation with Indo-Pacific countries, resulting in the highest-ever export value of US\$96.9 billion to the New Southbound region.
- Over the past seven years, since 2016, foreign direct investment in Taiwan has exceeded NT\$2 trillion. This not only reflects the world's confidence in Taiwan but also reverses Taiwan's previous trend of industries moving westward.





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