

Kaohsiung

Vibrant Harbor City Reinventing
From A Heavy Industrial Past
Toward AI and High-Tech Future



Charles Lin
Deputy Mayor of Kaohsiung City, Taiwan



01 Uncovering Kaohsiung



02 Imperative Tool of City Governance



03 Evolving from Smart City to AI City



**04 The Critical Role of Local Government :
Kaohsiung as an example**





Population

2.72 million

Area

2,952 km²



高雄

KAOHSIUNG

The largest city in southern Taiwan
Kaohsiung has both sea and air ports





From
Industry city
1960-2000

The image shows a large industrial complex, likely a steel mill or refinery, with multiple tall smokestacks and a complex network of pipes and structural steel. A large cylindrical tank in the foreground has the label 'DA3101' and some Chinese characters. The sky is dark and cloudy, suggesting an industrial or polluted environment.



To
Sustainable City
2000~Now

The image shows a dense urban landscape with numerous high-rise buildings and skyscrapers. The city is situated along a body of water, with a bridge visible in the distance. The sky is clear and blue, suggesting a clean and sustainable environment.



Daily Life in Kaohsiung





Daily Life in Kaohsiung





PARKs in Kaohsiung





EVENTs in Kaohsiung





EVERY CITIZEN OWN 10.41 M² GREEN SPACES

NO.1 AMONG ALL 6 METROS IN TAIWAN

Green Infra in Kaohsiung



Mobility Infrastructure



MRT



THSR



LightRail



Year 2020 :
51Km, 52 Stops
Year 2034 :
112Km, 114 Stops

KAOHSIUNG IS ONE OF FEW CITIES HOSTS AI & SEMICONDUCTOR SUPPLY CHAIN

**Foxconn & Nvidia
AI Super-Computing Center**

**TSMC 2nm Fabs in Kaohsiung
First Fabs Producing in 2025**

**Most Integrated
Semiconductor Supply-Chain
in Kaohsiung**



100+ Semiconductor Supply Chain in Southern Taiwan

The world's
most comprehensive
cluster for advanced
semiconductor
manufacturing

Asia New Bay Area Intelligent Technology Innovation Park
Chip-based Industrial Innovation Program IC Design Center

New Material Circular Industrial Park

Southern Taiwan Science Park -
Chiayi Science Park
TSMC CoWoS Advanced
Packaging Plant

Southern Taiwan Science Park -
Tainan Science Park

Kaohsiung Science Park

Baipu Industrial Park (in planning)

Ciaotou Science Park

Nanzih Technology Industrial Park

Nanzih Industrial Park

Renwu Industrial Park

Hefa Industrial Park

Kaohsiung

8 Companies
- Design

ELAN Microelectronics
PixArt Imaging
Socle Technology
ASPEED Technology



8 Companies
- Manufacturing

TSMC
PANJIT



Win
Winbond

16 Companies
- Packaging and
Testing

ASE
Chipbond



WinWay
Orient

45 Companies
- Materials

Entegris
AEMC
Merck



Sumitomo Bakelite
Air Products
Formosa Tokuyama
Advanced Chemicals

16 Companies
- Equipment

Applied Materials Taiwan
VALQUA
ASML
Allring
MIC
TIAN ZHENG International
E&R Engineering Corp.





Fully Integrated Industry Hub: Kaohsiung Bay Area Smart Technology Innovation Park



02

Imperative Tool of City Governance : Smart City Application



Smart City as An Imperative Tool of City Governance



City As Living Lab, Now **50+** Applications in City Services

Fortified Water Management Network Enhanced Disaster Resilience



Smart Transportation Real-Time Integration Improving Kaohsiung's Traffic

- ✓ Develop **ITS**(Intelligent Transport Systems) and Service Platforms
- ✓ **IOT** Real-time Data Collection
- ✓ **GUI** Intelligent Dashboard for Data Monitoring and Management
- ✓ **AI** for Road Network Signal Control and Event Response Decision

Multi-Info Integration Traffic Performance Cross-Unit Info exchange Real-time Road Condition Special Event Notification Smart Signal Control



Kaohsiung Agrinfo Mastering the Trends

Received multiple International Awards



Smart Production and Marketing

Analysis of
354 Vegetable
and Fruit Production
and Sales Cases

Smart Prevention

62 crops,
534 Early Warning Criteria
& Reclamation
Recommendations



Guaava

Cabbage

Time and Labor Saving

Diverse Applications, Inspection Time Saving over **50%**
Drone Spraying Saves **66%** of Labor



AWARD WINNING

Kaohsiung City Government©2025



Year		International Awards	Year		Domestic Awards
2025	➤	ASOCIO Outstanding Digital Transformation Organization Award	2025	➤	Smart City Innovative Application Award-Smart Governance
				➤	Smart City Innovative Application Award-Smart Healthcare
2024	➤	ASOCIO Public/Private Partnership Award	2024	➤	Smart City Innovative Application Award-Smart Transportation
	➤	ASOCIO Emerging Digital Solutions & Ecosystem Award		➤	Smart City Innovative Application Award-Smart Governance
	➤	WITSA ICT Excellence Award-Startup Ecosystem Award		➤	Cloud Computing & IOT Award-Outstanding Application Award
	➤	IDC 2024 Taiwan Winner : Special Award for Smart Cities-Best in Citizen Wellbeing		➤	ITS Taiwan Application Awards
	➤	IDC 2024 the Asia/Pacific Regional winner : Special Award for Smart Cities-Best in Citizen Wellbeing		➤	Government Service Award - Digital Innovation Award
2023	➤	Seoul Smart City Prize -Special Mention in Partnership with G6GL	2023	➤	City of Excellence Award-environmental group-Preferred
	➤	ASOCIO ICT Award-Health Tech Award		➤	City of Excellence Award-social progress group-Preferred
	➤	WCIT WITSA ICT Excellence Award-Outstanding Contribution Award		➤	Smart City Excellence Contribution Award-Smart Transportation
	➤	AFACT eASIA Award Sustainability & Circular Economy Gold Award		➤	Smart City Innovative Application Award-Smart Security
	➤	GO SMART Awards		➤	Smart City Innovative Application Award-Smart Transportation
				➤	Cloud Computing & IOT Award-Outstanding Application Award
2022	➤	Gartner Asia-Pacific-Government Digital Innovation Service Awards	2022	➤	ITS Taiwan Application Awards
	➤	WITSA ICT Excellence Award-Outstanding Sustainability Development Award		➤	Intelligent Transportation Systems Evaluation-Excellence Award
	➤	WITSA ICT Excellence Award-Outstanding Digital Opportunity Inclusion Award		➤	Government Service Award - Digital Innovation Award
	➤	ITS Hall of Fame Local Government Award		➤	Government Service Award - Social Care Service Award
	➤	IDC Smart Asia/ Pacific Awards-Public Safety Award		➤	Smart City Innovative Application Award-Smart Agriculture
	➤	IDC Smart Asia/ Pacific Awards-Transportation Award		➤	Smart City Innovative Application Award-Smart Healthcare
	➤	APEC Energy Smart Communities Initiative Best Practices Awards Program- Low Carbon Model Towns-Gold	2021	➤	Cloud Computing & IOT Award-Outstanding Application Award
	➤	APEC Energy Smart Communities Initiative Best Practices Awards Program- Smart Transport-Silver		➤	Smart City Excellence Contribution Award-Smart Service
2021	➤	GO SMART Awards		➤	ITS Taiwan Application Awards
				➤	Government Service Award - Digital Innovation Award
				➤	Smart City Excellence Contribution Award-Smart Governance
				➤	Smart City Innovative Application Award-Smart Transportation

03

Evolving From Smart City To AI City



Project in Progress : Kaohsiung Lighthouse Sovereign AI

10+ VLM Domains

City x Enterprise VLM Expansion

Transportation / Water Resources Management / Public Works /
Logistics / Power / Ports / Railways / Steel / Healthcare
Smart Hospital to Begin in 24Q3

300+ VLM Scenarios

Multi-modal GenAI Applications

Traffic Accidents / Typhoon & Disaster Response / Infrastructure /
Public Safety / Power Facilities / Port Operations /
Hospital Management 108 Scenarios by May 2025

50,000 Stream eq.

Diverse Smart City Camera Streams

CCTV / Public Transit / Police Cameras / Drones / Robotic Dogs /
Smart Glasses / Thermal Imaging 2,000 Streams by May 2025



4,000,000 Hours

Citywide Data Sources

Cosmos Curator – Curated Data for Sovereign AI Model Training
Currently 100K Hours of Video

100 KM² to Whole City

City-Scale Digital Twin 3D Platform

Omniverse City Management 3D Platform with Satellite Imagery

>100 K Synthetic Data

Omniverse-Generated Data

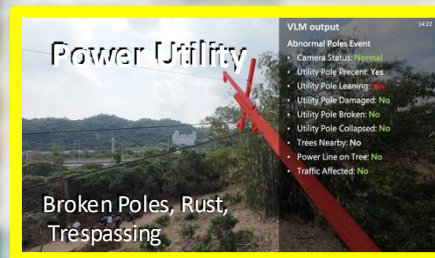
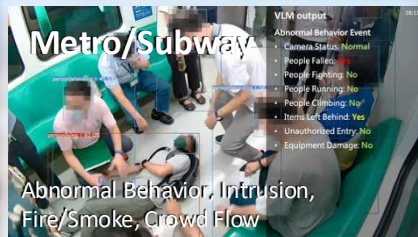
Photorealistic Digital Twin +
Physical AI Unlimited Synthetic Training Data for Corner Cases



Enabled by NVIDIA Metropolis & Omniverse & Cosmos
& Linker VisionAI Platform

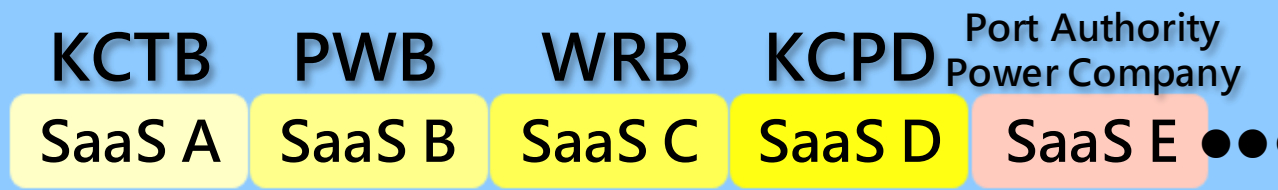


Lighthouse Project : Cross-Domain Use Cases



The Lighthouse Project marks a key milestone in Kaohsiung's smart city transformation, providing cutting-edge AI-driven solutions that position Kaohsiung as a global leader in AI and smart city development.

Kaohsiung
Lighthouse
Sovereign AI
Non-Silo AI



PaaS & Sovereign AI VLM

AI Infra & IaaS

Camera
Drone
Vehicle

Streaming



Silo AI



04

The Critical Role of Local Government : Kaohsiung as an example





The Critical Role of Cities in the New AI Era

City as a Platform

Policy & Ecosystem Fostering
Industry collaboration and
transformation through Agile
Urban policies and Open data

Cultivate ECOSYSTEM

Bridging Cross-domain Talents
and Top-tier Venture Capital to
Make AI Breakthroughs and Real
Solutions



The Critical Role of Cities in the New AI Era

Innovative Financing – PPP Model

Through Public-Private Policy(PPP)
Bridging Government and Industry
Resources to Accelerate the Deployment of
New AI Solutions

International Cooperation

To align with International Partners and
Foster cooperation in AI
and Smart Cities

Linker Vision | Kaohsiung

以發送即時通知給第一線應變人員

2025 SMART CITY SUMMIT & EXPO

Showcasing Kaohsiung's Smart Tech Innovation to the World



KEY ACHIEVEMENTS & METRICS



145

COMPANIES
PARTICIPATING



500

BOOTHS



24

COUNTRIES



18

CITIES



16

ORGANIZATIONS
PARTICIPATING

MAJOR INDUSTRY PARTNERS



中華電信
Chunghwa Telecom



中鋼公司



ASE



台灣電力公司
TAIWAN POWER COMPANY



Advanced
Medical
& Health



FOXCONN®



Welcome to Join Us Smart City Expo @Kaohsiung 2026/3/20-22

