

THE ECOLOGISTICS COMMUNITY

A community of local governments and partners committed to bringing sustainable, urban logistics into reality, through peer-to-peer learning, collaboration and knowledge exchange



桃園市政府
Tao Yuan City Government



ABOUT ECOLOGISTICS

Global freight demand will triple between 2015 and 2050 based on the current development (ITF Transport Outlook, 2019), exerting pressure on the cities' existing infrastructure. Transport accounts for 23% of the global greenhouse gases (GHG) emissions, of which logistics contributed to 40%. Logistics vehicles occupy 40% of urban space.

While the logistics industry is a critical economic driver, the externalities and direct or indirect impact on urban life cannot be overlooked. There is little systematic approach to guide critical sustainable urban logistics decision-making locally and at the international level.

EcoLogistics promotes transportation of goods by **giving priority to health, safety, people-centered urban development and low emissions** while also encouraging circular and regional economies to limit the growth of freight transport.

ABOUT THE ECOLOGISTICS COMMUNITY

Recognizing the gap between what exists and what is needed, ICLEI launched the EcoLogistics Community in 2019, the first city network globally committed to a sustainable urban logistics future.

The EcoLogistics Community aims to be the global platform for highly committed cities and expert organizations in advocating and driving sustainable urban logistics in cities and at an international stage. Through collaborative exchanges, innovative pilots and tools, capacity building, and multi-stakeholder dialogues, the Community supports local governments to enhance innovative capacity and real actions in sustainable urban logistics. Cities benefit from being part of the Community through the shared knowledge and resources made available to the network, as well as opportunities to disseminate their successes.

STRUCTURE

The EcoLogistics Community structure encompasses Community cities and partners, hosted by the Secretariat. The World Secretariat of ICLEI – Local Governments for Sustainability functions as the EcoLogistics Community Secretariat.

The Community cities form the core of the network, and one of the Community cities acts as the Chair for a phase (typically two years). The Community Chair hosts the EcoLogistics Community Chair Office in its city and functions as an essential role for representation and demonstration of ecologistics implementation in its cities. The Chair also receives continuous

and robust support from ICLEI World Secretariat in technical guidance and implementation approach to make sustainable urban logistics a reality. Partners are businesses, logistics experts, international agencies, and non-city organizations that will provide the cities with their knowledge and experience.

The EcoLogistics Community brings together highly committed cities and experts to create a sustainable urban logistics future.



BENEFITS OF JOINING THE ECOLOGISTICS COMMUNITY

By joining the Community, cities and partners can access:

□ An international network of partnership and collaborative exchange

Through thematic working groups and matchmaking, the Community enables closer partnership and collaborative exchange of knowledge, concepts, and experience between peer cities and partners. This sharing of information not only strengthens the interpersonal relations between the drivers in the local governments but also serves as an intercity resource platform for sustainable logistics-related topics.

Opportunities to collaborate on a specific topic of interest can also be identified and linked between cities and experts.

□ Capacity building program

Different capacity-building programs will be developed on ecologistics topics for the policymakers, practitioners, operators, and entrepreneurs to enhance institutional capacities to assess, plan, and implement ecologistics solutions. This includes peer city-to-city mentoring and exchange, workshops and seminars, and e-learning training and webinars.

By capacitating vital stakeholders, the Community hopes to replicate and scale-up successful pilots and projects for a more significant global impact.

□ Opportunities to shape international dialogues, global outreach and dissemination

Cities can communicate and disseminate results and activities to a broader audience, increasing visibility, and encouraging replication through various global communication channels.

The Community will host a flagship event to allow face-to-face networking and professional connections.

As a part of ICLEI's global advocacy platform, there are also opportunities to engage and shape international dialogues at high-level United Nation's events.

□ A solutions gateway to assessment tools, improvement strategies and showcase actions

The Community will serve as a knowledge hub, to document and showcase innovative and workable strategies, solutions, tools, and models to promote replication and scalability.

Materials will be accessible online to keep the Community cities abreast of excellent practices and solutions to enable and accelerate implementation.

□ ICLEI's proven model for tangible actions and real change

To address the multi-faceted challenges of urban logistics in cities, local governments can adopt ICLEI's methodology to strategically assess and implement real solutions to enhance sustainable urban logistics in their cities. The method encompasses the following steps: baseline setting, multi-stakeholder consultation, and capacity building, innovative demonstration actions, and long-term policy planning for a sustainable future.

Successful pilots can be assessed for replication and scale-up.

□ Roles of Community Cities

The goal of the Community Cities is to provide knowledge support and sharing of best practices and experience of the Community City. The Community Cities are expected to contribute to the following activities:

- Propose specific goals and quantified targets they intend to achieve (e.g. reduction of GHG emissions from last-mile delivery by 5%), suggest to also align with ICLEI's EcoLogistics Principles, where relevant
- Measure and report progress according to a common set of indicators
- Contribute and review on the Chair's initiatives, policy documents, demonstration actions, etc.
- Be available to mentor or exchange knowledge with other cities in different aspects based on their experience and knowledge to support local change
- Participate in at least one initiative of the collaborative learning activities each year (online and/or in-person)

***There are no fees to join the Community, and interested cities are encouraged to join regardless of ICLEI membership.

Interested in joining the Community?

Express your interest by contacting the team at ecologistics@iclei.org to learn more about the screening and selection process for membership.

ECOLOGISTICS COMMUNITY 2020-2021



GOALS	ASSESS BASELINE	ENGAGE AND CAPACITATE STAKEHOLDERS	SHOW ECOLOGISTICS IN ACTION	PLAN FOR A SUSTAINABLE FUTURE	DISSEMINATE GLOBALLY	GOALS
ACTIVITIES (2020 - 2021)	<p>Establish a baseline by data collection and analysis of the national and local framework and policies for transport and freight in Taoyuan.</p> <p>Utilize ICLEI's self-monitoring tool to establish the baseline for GHG emissions for Taoyuan's freight sector.</p> <p>Development of an EcoLogistics performance measurement indicator system.</p>	<p>Stakeholder engagement and consultations to facilitate capacity building, policy advice, and technology transfer provided by ICLEI and partners.</p> <p>Capacitate the multi-stakeholder groups through different tools and methodologies (e-learning, site visits and coaching by peer cities or experts, workshops, events, knowledge products, etc.).</p>	<p>Implement five demonstration projects in Taoyuan on sustainable urban logistics with close cooperation with the multi-stakeholder group.</p> <p>Assess impacts and evaluate the possibility to replicate and scale-up.</p>	<p>Conduct Strategy Mapping and Implementation Protocol with the stakeholders.</p> <p>Develop a Sustainable Urban Logistics Plans for Taoyuan.</p> <p>Offer the National EcoLogistics Policy Recommendation (NELPR) to the central government.</p>	<p>Facilitate close collaborations and learnings with interested Community cities and partners and on specific themes through the thematic working group</p> <p>Communicate achievements, experience, and impacts through various channels (events, knowledge products, social media, website).</p>	ACTIVITIES (2020 - 2021)
OUTPUTS	<p>A baseline report analyzing the local, national and international framework and the GHG emissions.</p> <p>An EcoLogistics performance measurement tool that can be adopted for global cities.</p>	<p>Foster partnership between multi-stakeholder groups to test new ideas, provide continuous input on the demonstration projects and the sustainable urban logistics action plan.</p>	<p>Demonstration projects function as living labs that can demonstrate innovative solutions, test effectiveness and enable wider replication and transformation of a sustainable city.</p>	<p>A strategic and long-term plan for Taoyuan to invest in sustainable urban logistics future with recognition from the central government.</p>	<p>High visibility of the results, outcome, and activities of the Community to encourage global cities to replicate and take action.</p>	OUTPUTS

ECOLOGISTICS COMMUNITY OUTCOMES

► Establish lasting mechanisms for partnership and knowledge sharing

The Community will strengthen systematic and innovative solutions in ecologistics planning and implementation in cities through close collaboration and exchanges between the Community, decision-makers, and the multi-stakeholder groups in Taoyuan. The new multi-stakeholder group in Taoyuan will continue to be a platform for partnership, enabling long-term strategic planning and implementation in ecologistics.

► Develop integrated ecologistics innovations and models into the broader sustainable urban logistics planning

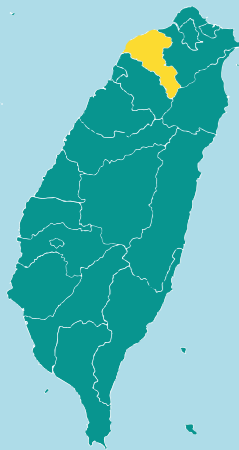
The EcoLogistics Community enables transformative change towards sustainable urban logistics through innovative methodologies, pilots, solutions, and collaborative partnerships. By shaping conversations on the importance of incorporating urban logistics to more comprehensive city plans, real impacts and innovations can be fostered and realized through collaborative partnerships.

ECOLOGISTICS COMMUNITY OUTCOMES

► Contribute to local, national and global sustainability goals

The EcoLogistics Community will accelerate climate actions and sustainability goals by equipping cities with the knowledge, mechanisms, and tools to create livable and sustainable cities through ecologistics. Taoyuan's Sustainable Urban Logistics Plan will increase impact and contribute to local, national, and global sustainability and climate goals.





ECOLOGISTICS DEMONSTRATION PROJECTS

IN TAOYUAN

Taoyuan City is the Chair and Host of the Community in 2020 and 2021. It aims to use the integration of technology, policies, and planning as a vehicle for environmental, social and economic sustainability in the urban freight sector.

Taoyuan City is a leading global logistics hub, and its comprehensive logistics industry contributes greatly to the City's industrial and economic growth. However, this growth also comes with various environmental downsides, such as air pollution, noise pollution, congestion, waste pollution, and GHG emissions. Therefore, the city sees sustainable urban freight as an important opportunity for both improving city life and being one of the first-movers in East Asia.

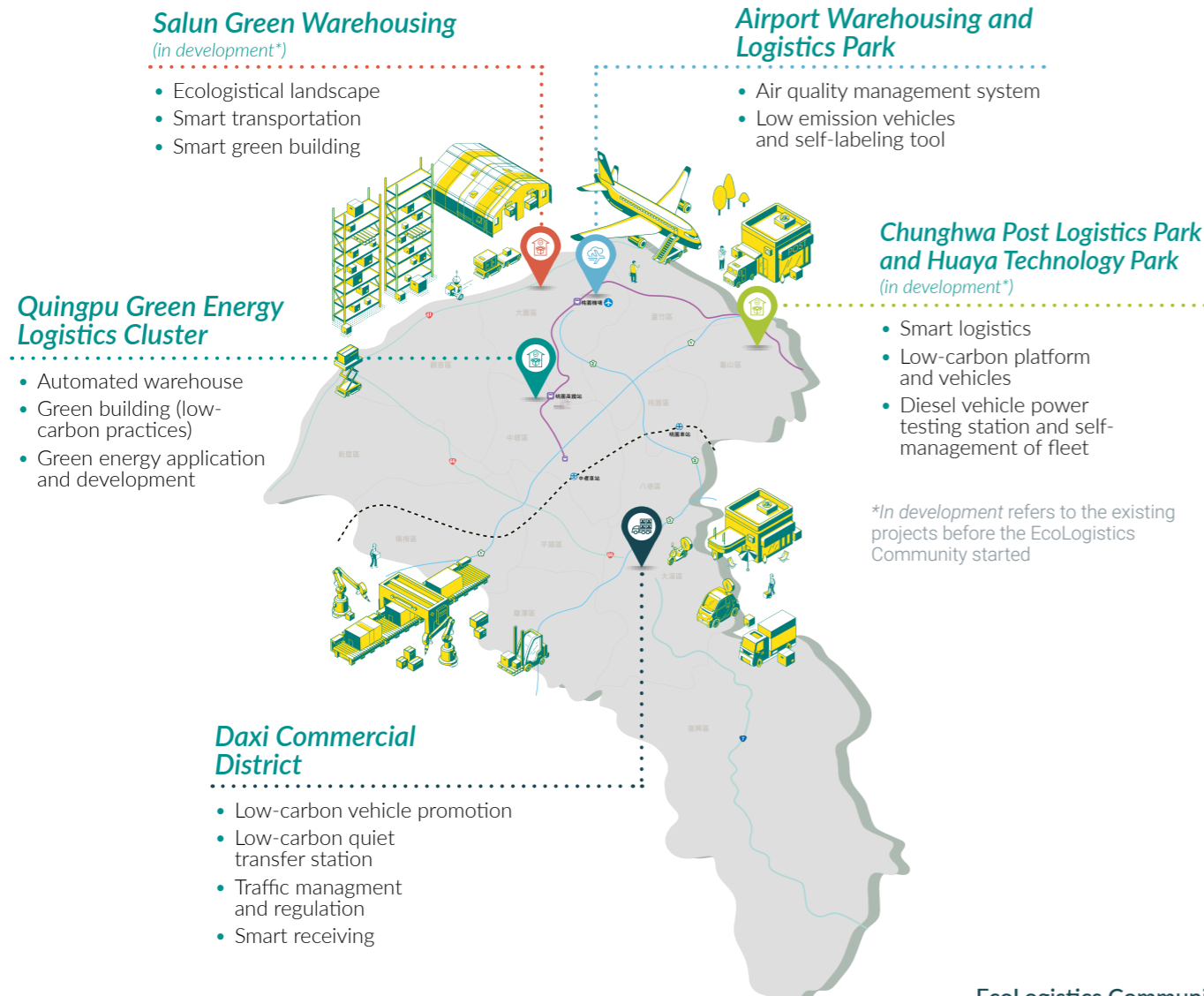
Taoyuan is undertaking five ecologistics demonstrations projects in order to bring back lessons learned and successful strategies to the EcoLogistics Community.



Demonstration projects function as **living labs that can demonstrate innovative solutions, test effectiveness and enable wider replication and transformation of a sustainable city.** Through demonstration projects, technical and theoretical knowledge can be translated into reality, allowing for innovations and active participation from the stakeholders and users. Additionally, adopting the living lab approach enables a close partnership between the public and private sectors, as well as the end consumer in some cases.

These demonstration projects have been selected in a variety of locations in Taoyuan, allowing testing of various ecologistics solutions in different environments. Two of the projects capitalize on existing development and strategies.

Engagement and collaboration fostered during this period can enable a long-term partnership between the key industry players while the experience and impacts of the demonstration actions will be integrated into the more comprehensive Taoyuan's Sustainable Urban Logistics Plan for Taoyuan and the National EcoLogistics Policy Recommendation (NELPR), as a long-term goal.



AIRPORT WAREHOUSING AND LOGISTICS PARK



This demonstration project focuses on emission reduction in air cargo operations and improving efficiency through smart warehousing. The project uses a market-based approach to incentivize leading companies to upgrade logistics vehicles and phase-out diesel vehicles.

Taoyuan International Airport has an annual 46.53 million passengers, 2.32 million metric tonnes of cargo volume, 250,000 aircraft, and 93 airlines flying to 129 cities regularly. The Taoyuan International Airport cargo terminal and the following four major shipping companies are one of the busiest in Taiwan, making it impactful to pilot solutions.

Low emission features	<ul style="list-style-type: none"> • Inspect diesel vehicle exhaust
Smart technology and digitalization strategies	<ul style="list-style-type: none"> • Integrate the different information, communication, transport management, building management systems into a platform to streamline activities • Promote a license plate recognition system and e-tag identification system • Automatic parcel delivery and integrated to the postal centers • Install parcel sorter and live-tracking of goods delivery
Infrastructure changes	<ul style="list-style-type: none"> • Direct arrival of each freight vehicles to the platform through 3D-roundabout design
Market-based approach & stakeholder partnerships	<ul style="list-style-type: none"> • Create a self-managed labeling system to incentivize cleaner vehicles



DAXI COMMERCIAL DISTRICT

This is a busy mixed-use district with commercial, residential areas and public space covering 30 hectares. The demonstration project will showcase ecologistics in a busy commercial and residential district with rich cultural elements and history by improving and consolidating last-mile delivery.

This demonstration project will create efficient freight delivery services while reducing conflict between passenger transport, freight vehicles as well as aligning a complex network of stakeholder interests (tourists, residents, shopkeepers, etc.). It will also identify and create self-pick up stations across the district and integrating it with existing nodes, such as convenience stores.

Low emission features	<ul style="list-style-type: none"> • Create a low emission and low-speed zone by enhancing walkability, reducing noise pollution from vehicles and readjustment of the logistics vehicle route and delivery time window • Deployment of low emission vehicles (LEVs) delivery and provision of subsidies, and priority lane for LEVs
Smart technology and digitalization strategies	<ul style="list-style-type: none"> • Installation of the intelligent transport system (ITS) for better traffic direction and information
Infrastructure changes	<ul style="list-style-type: none"> • Establish smart and flexible pick-up systems, including self-pick up stations and integrating pick-up services with existing points (e.g. convenience stores, fuel stations) • Construct logistics consolidation center for key ecologistics operators revamping the Daxi Parking Area II to allow for logistics vehicle loading and unloading • Loading and unloading space and time control through access pass, online appointment and night delivery with smart management



SALUN GREEN WAREHOUSING (in development)

This area is 28.36 hectares, including 25 existing households. Logistics and warehousing companies are the most prominent investors in the Salun Green Logistics Park. Here, the development trajectory focuses on clean energy and smart operations. This demonstration action aims to showcase the smart warehousing platform at an agricultural depot. The main focal point of this site is to position itself as an ecological logistics green building park where the buildings are to be energy-efficient and operations are resource-efficient. Smart traffic management and ecological landscape elements are also being implemented.

the picture is realistic-simulation sample

Smart technology and digitalization strategies	<ul style="list-style-type: none"> • Construction of smart park ecosystem management - smart air and water management, transport system management, and LED street lights management
Energy systems	<ul style="list-style-type: none"> • Installation of solar energy depot
Market-based approach & stakeholder partnerships	<ul style="list-style-type: none"> • Green labeling system to incentivize green buildings



QINGPU GREEN ENERGY LOGISTICS CLUSTER

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This demonstration project will create an alliance between these vital industrial players to reduce packaging and streamline delivery as well as partially powering operations with solar energy. It will also encourage logistics symbiosis by allowing significant companies to collaborate and share warehousing to serve the end-customers better while reducing operational cost. The green energy cluster includes Taiwan's most extensive and busiest logistics centers, operators, warehouses, and shippers, including DHL Express, PCHome and momo (to name some of the largest e-commerce companies in Taiwan) and the largest IKEA store in Taiwan. It is located next to the Taoyuan High-Speed Rail station.

Low emission features	<ul style="list-style-type: none"> • Subsidize low-emission logistics vehicle
Smart technology and digitalization strategies	<ul style="list-style-type: none"> • Smart warehousing management – automatic storage allocation, the electronic pick-up system
Energy systems	<ul style="list-style-type: none"> • Energy-efficient building and warehouse interior control • Building a solar energy supply depot for key industrial players
Market-based approach & stakeholder partnerships	<ul style="list-style-type: none"> • Integrate e-commerce platforms, packaging, and logistics companies to reduce packaging for online sales by creating an Alliance amongst the significant logistics and e-commerce companies



the picture is realistic-simulation sample

CHUNGHWA POST LOGISTICS PARK AND HUAYA TECHNOLOGY PARK

(in development)

Chungghwa Post Logistics Park emphasizes on smart logistics and digitalization, investing 28.347 billion TWD between 2015 and 2024. The Park is 17.14 hectares, also servicing the Huaya Technology Park, a predominantly electronic industrial area. The finalization of the upgrade will create about 6,000 employment opportunities.

The Chungghwa Post logistics park is envisaged to manage 70% of Taiwan's Post in the near future, making planning for a one-stop service to improve customer service. At the current stage, the post office is responsible for transportation and delivery. In the future, the Logistics Park will also include goods pick-up and control service, making it a one-stop service for all. For example, setting up a storage center in the logistics park central, allowing for cargo handling, packaging, and delivery to domestic and foreign countries will now be the Post's responsibility.

The Chungghwa Post Logistics Park's business strategy is to provide value-added core logistics operations and services also to support the Huaya Technology Park, which houses various relevant electronic companies.

Energy systems	<ul style="list-style-type: none"> • Energy-efficient building with water-saving systems • Wind and solar energy depot
Market-based approach & stakeholder partnerships	<ul style="list-style-type: none"> • Integrate e-commerce platforms, packaging, and logistics companies to reduce packaging for online sales by creating an Alliance • Create a labeling system to incentivize cleaner vehicles

EcoLogistics Community

The EcoLogistics Community is initiated and coordinated by ICLEI – Local Governments for Sustainability. The ICLEI World Secretariat is responsible for project management, coordination, and implementation. The Taoyuan City Government funds the EcoLogistics Community 2020 – 2021 and is a strong implementing partner.

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