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Target Readers:

- Employees / Labor Unions
- Government
- Shareholders / Investors / Financial Institutions
- Customers or Partners or Industry Associations
- Local Residents
- NGOs

3 GOOD HEALTH AND WELL-BEING



6 CLEAN WATER AND SANITATION



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Material Topics

- Response to climate change
- International standard certifications
- Sustainable and eco-friendly buildings
- Innovation in processes and products
- Use and management of energy and resources
- Environmental pollution management
- Ecological conservation
- Sustainable development of supply chain
- Safety and health management of contractors
- Client safety
- Crisis management and disaster prevention


Purpose of Management

As we love the nature and the surrounding communities, we take into account economic, social and environmental impact or land development and planning, in order to provide comfortable and safe space. Our goal is to build an eco-friendly, green, energy-saving, smart and sustainable park.

Management Approaches and Effectiveness
Evaluating Mechanisms

- Land development projects focuses on minimizing carbon emissions and introduces the advanced technologies from abroad to build an ecological city.
- The design of the park meets to the criteria for Taiwan's EEW and Intelligent Building as well as the United States' LEED.
- We have refined the response measures against various incidents and disasters and introduced technical applications to ensure the safety of the contractors and tenants.
- The development and design of Tpark factor in the landscape, ecology, culture and environment and ensure biodiversity.
- The construction management of the ongoing development projects abides by related laws and regulations and seeks to minimize pollution of all sorts during construction.
- We aim to build an exemplary green and smart park in Taiwan.



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6.1 About Far Eastern Resources Development Co., Ltd.

Established in 2003, Far Eastern Resources Development (hereinafter referred to as FERD) is a subsidiary wholly owned by FENC. Its business includes real estate development, leasing and sales, as well as property management. During the reporting period, there was no significant change to the subsidiary's organization, structure, ownership or supply chain. In 2017, the employees of the company numbered 32, of which 19 are male and 13 are female. 4 people are contract employees. The company paid NT\$30.63 million for house tax in 2017 and NT\$378 million for land tax, a decrease of 30% from the year before because of no large land sales.

The company adheres to FENC's guidelines with regard to administrative management, internal control, and risk response. In 2017, there was no particular change in land development risk and response compared with the previous year. The company focused on gaining approval from the government for land development, strengthening communication with people living in the neighborhood, responding actively to the policy change when the construction is underway, minimizing environmental and ecological impact, addressing climate change issues through infrastructure, continuing to promote arboreal protection and introducing technological applications to support safety management. In order to improve its employees' knowledge about risk management, the company held seminars on commercial fire insurance and public liability insurance.

6.1.1 Progress of Major Development Projects

FERD continues to develop Tpark (Taipei Far Eastern Telecom Park) in Taipei and Spa Resort in Jiaoxi Township, Yilan County.

• Tpark



Located in Banqiao District, New Taipei City, Tpark is a communications and digital industrial park that occupies an area of 24 hectares and encompasses research and development office buildings, residential buildings and malls.

The TPKA building continues to solicit tenants. Its total floor area is 62,000 square meters and its leasable area is 50,000 square meters. The building's occupancy rate was 57% by the end of 2017 and is expected to reach 80% in 2018.

The progress of the construction in 2017 is described below:

The construction of the North Park, occupying an area of 20,000 square meters, was completed in February, 2017. The ongoing projects include TPKC Internet Data Center, TPKD R&D Center (hereinafter referred to as TPKC/D) and Tpark's residential building Zone B (hereinafter referred to as Zone B), in addition to Tpark's residential building Zone C, for which we will submit our application for urban design review in 2018.

Project Name	Base Area (m ²)	Total Floor Area (m ²)	Estimated Date of Completion	Height	Progress in 2017	
TPKC Internet Data Center and TPKD R&D Center	TPKC	5,660	33,699	October, 2019	11 floors above ground 3 floors underground	Construction commenced in June. The slurry wall was completed in September. Excavation began in December.
	TPKD	9,725	57,900	October, 2019	16 floors above ground 3 floors underground	
Tpark's Residential Building Zone B	Zone B	5,130	28,707	December, 2019	Three buildings 3 floors underground 27 floors above ground	The grating work began in September.



Note:

1. TPKC Internet Data Center belongs to FarEasTone Telecommunications, while TPKD R&D Center is FERD's property.
2. Zone B is a joint venture between Far Eastern Construction Company and FERD.

• Spa Resort

Located in Jiaoxi Township, Yilan Country, the Spa Resort occupies an area of 10 hectares and encompasses a hotel, shopping mall and scenic restaurant.

Project Name	Base Area (m ²)	Total Floor Area (m ²)	Estimated Date of Completion	Height	Progress in 2017
Spa Resort	35,076	68,327	December, 2021	8 floors above ground 2 floors underground	We have submitted the documents on building volume, overall landscape and transportation, pending review in March, 2018.

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Meticulous Construction Management

Procedures before, during and after construction have been established in accordance with the law. Communication with the local community have also been established, so that people living in the neighborhood can share their views with us. We care about public health and environmental protection, so in addition to monitoring environmental quality periodically as clean, we transport and dispose of construction waste in accordance with Waste Disposal Act and Construction Waste Treatment Plan. There is strict supervision over the transportation route and the construction time every day to minimize the impact on the surrounding neighborhood and the environment. Moreover, rules regarding violations and disciplinary actions have been established for the contractors to follow. In case of a major violation, the people involved will be suspended from work. No punishment will be deferred to avoid causing a delay in construction.

Waste Statistics in 2017



Note:
1. The construction waste for TPKC/D was the slurry from the slurry wall that is not toxic and no construction waste was produced from the grating work for Zone B.
2. General waste refers to daily waste and food waste produced by employees during construction. It was handled by a local disposal firm that has level-B waste disposal qualification. The amount of general waste for TPKC/D is 13,680kg and Zone B is 400kg.

6.1.2 Construction Contractor Management

FERD's contractors were selected by its parent company in accordance with procurement-related regulations. Their contracts require them not to accept bribery, employ child laborers or illegal foreign laborers, consider local laborers first for employment and abide by the Labor Standards Act. The contractors can strictly monitor the people who enter or exit the construction site by utilizing fingerprint and facial recognition systems, which can effectively help prevent the man-made errors. Besides, workers can create their fingerprint or face data in the systems only after completing training regarding occupational safety, safety and health as well as construction site management. This requirement can help the company ensure that all workers have received complete training and that the contractors do not hire child laborers or illegal foreign laborers.

Before construction, contractors are required to submit safety, health and environmental protection plans and enroll in a contractors' all risks insurance (CAR) which include construction financial loss insurance, employer's liability insurance and third-party liability insurance. Safety, health and hygiene are paramount to us, in addition to the quality of construction. Therefore, we have built the safety and health management system and used the PDCA approach to improve management. For new construction projects, we hired third-party labor safety and health consultants and established an SHE committee, the members of which are the safety and health personnel from the contractors. The consultant works with the safety and health personnel to ensure the workers' safety and health procedures are in place and that their practices are compliant with the procedures, coordinate efforts during construction and remind workers of construction safety. If there are risks from falling, electrical shocks, falling objects, collision, or the operation of mobile cranes, the consultants that have level-B labor safety and health qualifications will assess such risks beforehand and introduce safety measures. Safety and health inspections are required each day, while review, improvement status, construction safety, risk control and reporting of false alarms are all required items for each week.



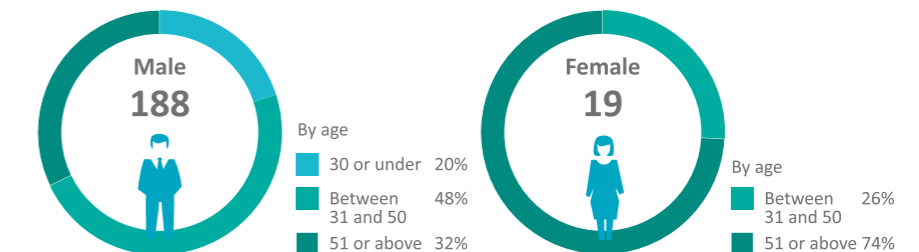
Using Smart Technology for Construction Site Management

Construction Safety Records in 2017


In 2017, 4,228 people worked at construction sites for a total of 37,432 hours. All construction projects proceeded on schedule; no false alarms, construction site accidents, occupational diseases or lost labor hours were reported.

Note: Contractors made personnel arrangements on site based on the progress and type of construction and set rules to determine absence and process leave applications.

Contractor Employee Information in 2017



Note:
1. This refers to the people who participate in the new construction projects including TPKC/D and Zone B.
2. The employees are R.O.C. nationals and full-time workers hired by the contractors.

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6.2 Ecological Conservation and Environmental Friendliness

We considered our land use plan, the design for biotic and plant communities, space for humanities and cultures, storm management and scenic landscape. From these concepts, we created and built our urban green space, ecological water treatment system, green streets and the pedestrian and bicycle traffic flow. Therefore, the value of Tpark is to be an ecological community that is characterized by unique cultural values, environment arts, humanity-oriented transportation as well as energy conservation and carbon reduction.

6.2.1 Biodiversity

In 2017, the construction of the North Park was completed, costing a total of NT\$130 million. We have built an environment that is beneficial for tree roots to spread and provide habitat diversity, using trees, bushes, bird-luring and butterfly-luring plants, porous waterway banks and artificial wetlands. To increase greenery, trees, bushes and groundcover plants have been grown for the ongoing TPKC/D project. A distance of 4 to 8 meters is required between trees, depending on the size of tree crown. Variable soil depths are used for the benefit of growing different trees, bushes and flowers. In order to avoid affecting birds' sleep or their migration in the evening, the projection area of the street lamps is limited to car lanes and sidewalks. Moreover, street lamps are covered with hoods to prevent glare and ensure the park is an ideal place for people to walk and living things to grow.

TPKC/D Birds-luring and Butterflies-luring Plants



153 trees, 138 of them are indigenous trees that attract birds and butterflies.



2,204 bushes, 1,978 of them are indigenous bushes that attract birds and butterflies.



North Park



Tpark

6.2.2 Saving Energy and Cutting Carbon Emissions

Energy Management

The Tpark management team aims to reduce 1% of electricity use every year, while maintaining operations of TPKA building and the comfort of the people working in it. In October 2017, LED sensor lighting was adopted everywhere in the underground parking lot, saving around 5,000 kw/h every month. In 2018, we will carry out an electricity-conservation feasibility assessment for temporary parking space. In 2017, the leased area of TPKA building increased 6.38% from 2016. The use of electricity is growth 3%, because the new tenants operate 24 hours. In addition, we have obtained the EEWH Candidate Certificate for the ongoing construction of TPKC/D and will apply for the EEWH gold level upon completion of the buildings. By Taiwan's green building standard, there will be a fixed amount of 4,106 metric tons of carbon dioxide. We plan to apply for the gold-level certificate for Intelligent Building Label and the U.S. LEED certification within 6 months after the construction is completed and we obtained the building use permit.

Energy Consumption

Unit: GJ

	2015	2016	2017
TPKA Building(A)	22,880	23,046	23,781
Outdoor Space(B)	416	74,830	652
Tpark(A+B)	23,296	97,876	24,433
Spa Resort	32	200	(Note1)
Total	23,328	98,076	24,433

Note:

- In 2017, there was no construction at Spa Resort, so no electricity use is reflected in the statistics.
- In 2017, the amount of electricity used in outer space at Tpark is lower than 2016 as a result of decreased number of construction days.




GHG Emission

Unit: t-CO₂e

	2015	2016	2017
TPKA Building(A)	3,362	3,387	3,494
Outdoor Space(B)	61	10,996	96
Tpark(A+B)	3,423	14,383	3,590
Spa Resort	5	29	(Note2)
Total	3,428	14,412	3,590

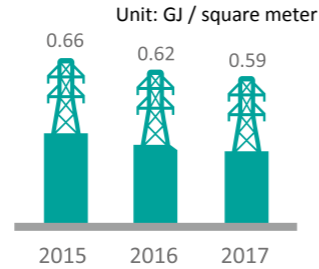
Note:

- All GHG emission figures are indirect emission (Scope 2). Electricity emission factor refers to the "electricity emission factor in 2016" provided by Bureau of Energy, Ministry of Economic Affairs.
- In 2017, there was no construction at Spa Resort. No power usage was calculated, hence no GHG emissions

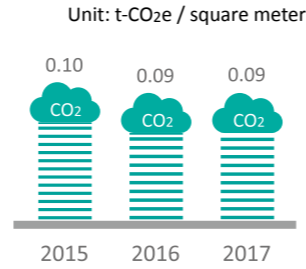
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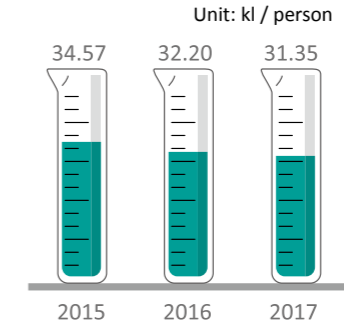
❖ Energy Intensity at TPKA Building



❖ GHG Emission Intensity at TPKA Building



❖ Water Intensity at TPKA Building



Water Resources Management

We collect and reuse rainwater through the storm management system. According to the data of rainfall in Banqiao District published by the Central Weather Bureau in 2017 and an estimate of the total capacity of infiltration trenches and the two ecological ponds at the North Park and South Park, a total of 50,000 kiloliters of rainwater was collected to water the street trees, be the source of migrant birds' drinking water and dissipate heat through evaporation. According to the readings of the water meter, the TKPA building collected a total of 716 kiloliters of rainwater, which was used to water the plants at the base. As for the amount of water used at the building, we monitor our monthly use of water and promote water conservation to tenants. In 2017, the total use of tap water decreased 2.64% per capita, compared with 2016.

❖ Water Withdrawal

Unit: kl

	2015	2016	2017
TPKA Building(A)	38,025	35,559	35,052
Outdoor Space(B)	173	788	1,066
Tpark(A+B)	38,198	36,347	36,118
Spa Resort	43	3,415	(Note2)
Total	38,241	39,762	36,118

Note:
1. All water used was tap water. No negative impact on water sources was made.
2. In 2017, there was no construction at Spa Resort.

 Experts' Recognition



Dieter Grau / Partner of Ramboll Studio Dreiseitl

Ten Years ago, we created and developed very progressive and very innovative design concept for the Tpark. This design is now state of arts and cutting-edge quality. The park is in its expression more than just a design, it is more than infrastructure, it plays the role of ecology of a city district and lasts over a long period. That is what we are proud of.



Pan I-Ju / Member of the standing committee in Association of Culture Environment Reform Taiwan, Master of Urban Design of Environmental Arts Design Co. Ltd.

The nurturing water is the central theme of the North Park. The rainwater from the sky, the water that drains away on the ground, the water collected for the purpose of reuse, the source of water that nourishes all living things and the beautiful water landscape are all used creatively to integrate people into the environment harmoniously and enable a mutually beneficial relationship between people and other living things.

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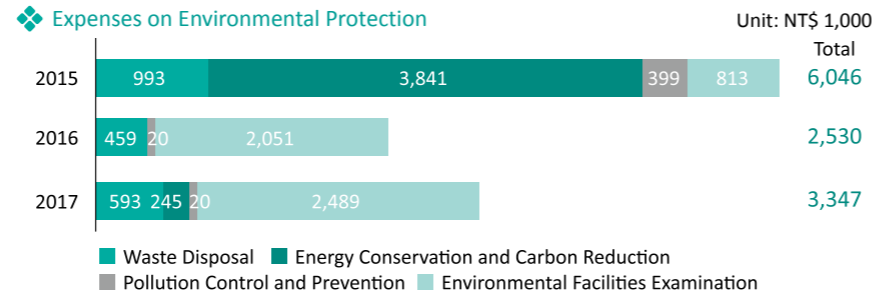
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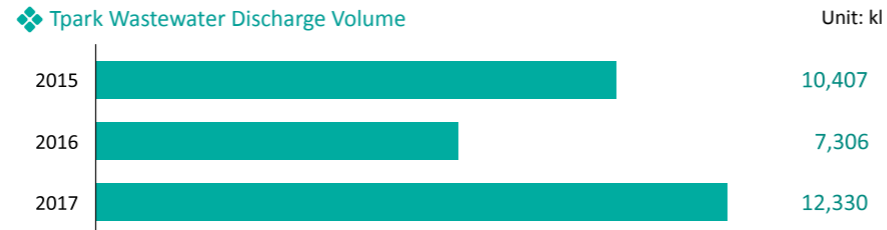
6.2.3 Pollution Prevention

Every year, more than 50,000 cars park at TPKA building. In order to reduce the exhaust emitted by the cars slowing down at the parking lot, electronic tickets were adopted in place of parking tickets in all parking lots in 2017. At the park, pollution is primarily generated by the Research and Development Office. However, there are no emissions of air pollutants, discharge of manufacturing wastewater or solid waste from manufacturing processes. The daily wastewater and solid waste produced by the employees are managed by a designated unit. With respect to construction projects, we monitor air quality at the park every quarter in accordance with the law. In 2017, the values we obtained were far below the legal limits.



Wastewater Management

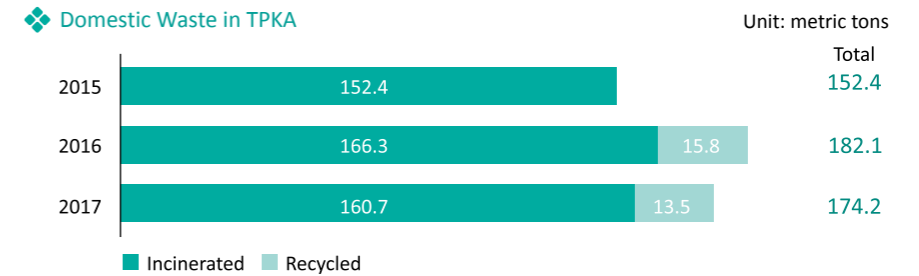
All the wastewater produced at Tpark was domestic wastewater, not wastewater from heavy industry or factories. On a weekly basis, wastewater treatment facilities were maintained and the quality of wastewater was examined. When the quality of treated wastewater reached the national standard, the wastewater was then legally discharged to the Danshui River. Annual reports on discharge volume and wastewater quality were made to governing authorities. No environmental impact was created as a result of the wastewater discharge.



- Note:
- The total wastewater discharge is less than to total water usage because the water in the cooling tower evaporates, the water used to wash the external walls quarterly and conduct fire drills are discharged directly to the gutters and the in-pipe water from the fire prevention and sprinkler construction is directly discharged in the rainwater tank.
 - In 2017, the wastewater discharged is greater than 2016 because the efficiency of grease separation device at the restaurant on the first floor was improved. The wastewater met the building's discharge standard, so it could go straight to the building's wastewater treatment system. There was no need to outsource such work as removing the sludge and processing the wastewater.

Waste Reduction

TPKA Building produces only domestic waste, instead of general or hazardous industrial waste. Also, for waste reduction and recycling, recycling bins are available at each floor in TPKA building. Although the number of people working in the building increased by 11.9% in 2017, the domestic waste was decreased by 4.3%, compared with 2016; the waste that requires incineration was down by 3.3%.




Note: In 2015, there was no waste reduction and recycling statistics data and domestic waste was addressed by qualified manufacturers.

6.2.4 Smart Management

Tpark is an open park, the security of which is maintained by a designated unit. The unit participate in the security meeting held by the local police station every month and collaborate with the police closely to ensure the environment is safe and secure. In 2017, upon the completion of the North Park, we increased the devices and equipment in the control room, shifted from a passive monitoring screen to an active-reporting screen and used a cloud storage system to manage alarm events to improve the quality and efficiency of the park's security management and effectively prevent man-made errors and hardware backup issues. With the advancement in smart image identification technology, the use of optical fibers and digitization is planned to improve the speed and quality of image transmission. The old transmission method will be phased out in 2018. To strengthen security management, save energy and cut carbon emissions, we have introduced smart application technologies to make the park a smart and ecological park.








Tpark Disaster Prevention Center

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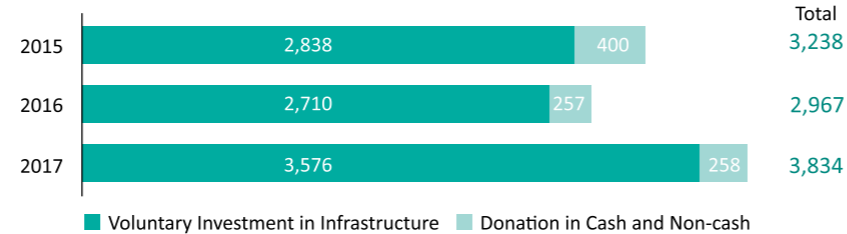


◆ Amount Invested in the Smart Park Unit: NT\$ 1,000

	Description	Amount
 Disaster Prevention and Monitoring	Water levels in the ponds are monitored at all times to prevent and detain floods and preserve water.	1,133
 Energy Consumption Management	Smart meters and water meters are used to monitor irregular use of electricity or investigate and fix leakage in real time.	2,885
 Smart Spraying	Rain sensors and rain gauges are used to assess the soil environment and to determine whether to activate the auto spraying system rather than using the timed and rationed spraying method.	1,650
 Smart Lighting	Lighting is controlled based on the actual illumination and malfunction is reported automatically, reducing 14% of time when the lights are on, compared with the traditional method that turns on the lights at fixed points in time.	1,324
 Security Surveillance	Monitors are coupled with the SOS real-time communication system and alarming light emitting system to strengthen support for people in need and prevent danger.	15,673
Total		22,665

6.2.5 A Mutually Beneficial Relationship

◆ Amount Invested in Social Engagement Unit: NT\$ 1,000



Note:
 1. The voluntary infrastructure investment includes landscape plants maintenance works, ecological ponds operation, maintenance of roads (walks, lanes) and traffic signs, etc.
 2. Cash and non-cash donations include social care and industrial development activities.
 3. In 2016, Northern Park was constructed using the advanced ecological concept construction technology and NT\$130 million was not included in the calculation.

The installation art at TPKA building is known as Ascending Community. The vertical and interlocked structure depicts the close-knit relationship among the community members, their continuous pursuit of self-improvement and their efforts to seek higher-quality living environment. Built upon the mutually-beneficial relationship, the park and its natural surroundings are open to people living in the neighborhood. Notices are put up to raise public awareness of the various plants in the park and also the importance of rainwater recycling. We will continue to exchange views and share our experience in building a smart, green park with the government, industry and academia overseas. In addition, we want to create a prosperous future with our tenants and enthruse them through our PR team with various opportunities for further development.



Installation Art:
Ascending Community



Promoting International Green and Smart Parks

- New Taipei City government made an arrangement with the Hong Kong General Chamber of Commerce for the exchanges between Taiwan and Hong Kong on the trends regarding smart city industry.
- ICF Canada visited Tpark to exchange views on the international development of smart cities and Taiwan's smart technologies



Hong Kong General Chamber of Commerce



ICF Canada

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Education

- Tpark collaborated with Banqiao Senior High School to design a course on the studies of Banqiao. Originally only once a year, the course was provided twice a year from 2017 and utilized VR technology to inspire interest in green technology among students.
- The Exhibition of Far Eastern Architectural Young Talent was held as a joint effort between Tpark and Far Eastern Memorial Foundation to encourage students create architectural design.
- In 2017, a total of 327 students and teachers from senior high schools and universities visited Tpark in 7 tours to understand the workings of smart and green ecology.



Tenants' Business Development

- We allow the tenants to play their corporate videos on the elevator TVs in TPKA building.
- We invited Teradata Corporation and inwinSTACK to participate in Yuan Ze University's internship program.
- We helped inwinSTACK to collaborate with Japanese businesses to expand into the Japanese market.
- We worked with YAMAHA, Yuan Hsin Digital Payment and Sugar to conduct online livestreaming at the Christmasland in New Taipei City.



Video streaming at the Christmasland (Chinese Version)

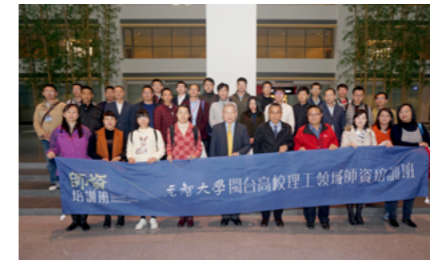


Recognition and Praise

- Construction and Planning Agency Ministry of the Interior has promoted integrated urban flood management and listed Tpark as an example to learn from.



Representatives from the Construction and Planning Agency, Ministry of the Interior and the Ministry of Internal Affairs visited Tpark to inspect and learn Low Impact Development



A Training Program held by Yuan Ze University for science and engineering teachers from Taiwan and Fujien Province



Banqiao Senior High School



Department of International Business Administration, Chinese Culture University and East China University of Science and Technology