

Low Carbon Taipei County

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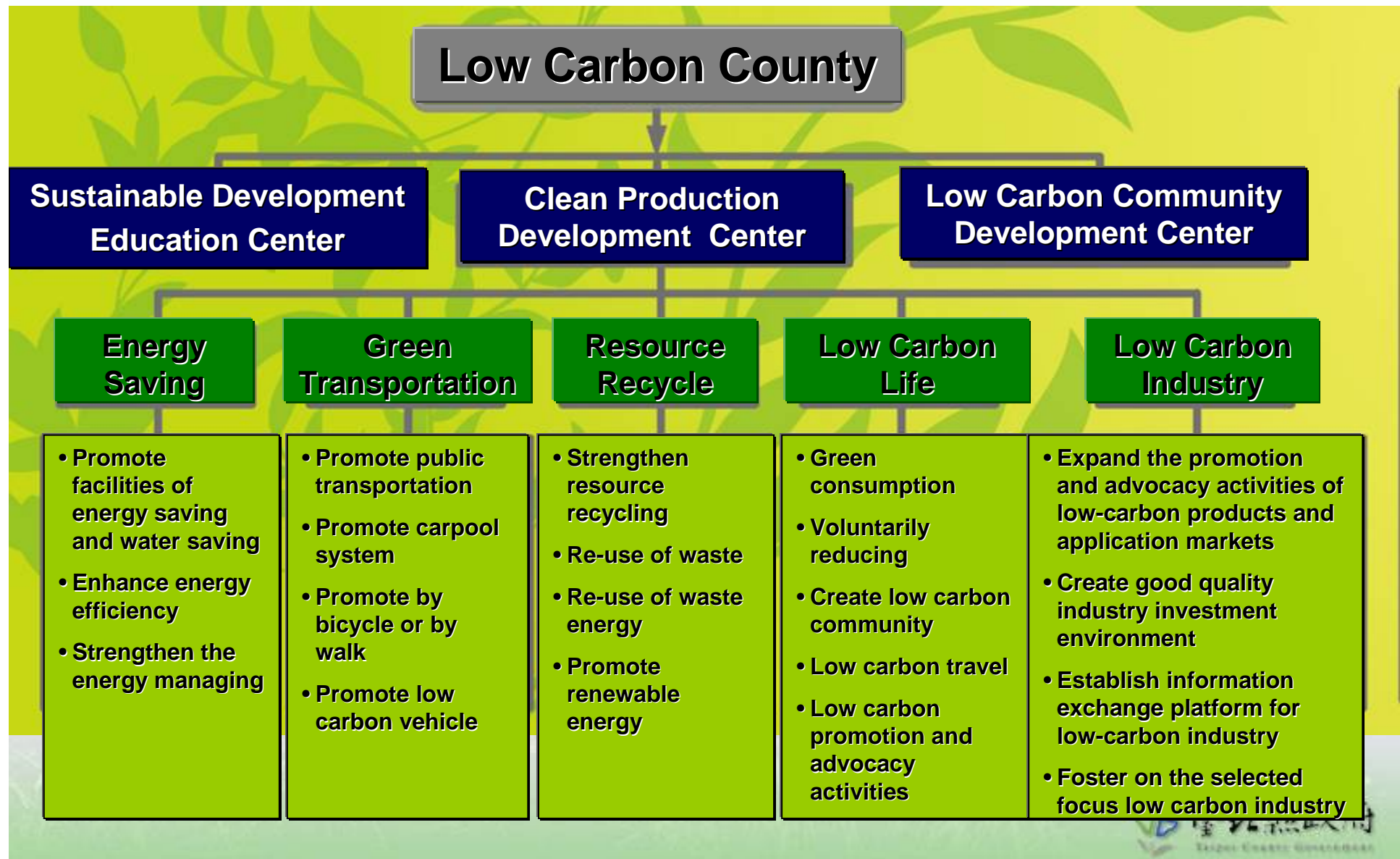
Chief of Low Carbon Community Development Center

Environmental Protection Bureau

Taipei County Government

Executive Framework of Low Carbon Taipei County

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Low-Carbon Clinic



**Diagnosis department
including electric section, air-
condition section, lighting
section, water saving section,
resource recycle section,
green building section**

- ◆ **One phone call for low carbon diagnostic services.**
 - ◆ Diagnostic services for more than 150 communities and 300 stores per yr
 - ◆ Reduce 7,455 tons CO₂/yr
 - ◆ Saving 11,630,000 degree (kW/hr) electricity and NT\$ 44,430,000/yr

Low-Carbon Community

- ◆ 600 successful cases of offering financial aid for conversion to energy saving lighting in resident communities and business office buildings.
 - ◆ Reduce 2,230 tons CO₂/yr
 - ◆ Saving 3,500,000 degree (kW/hr) electricity and NT\$ 10,850,000/yr



LED Traffic Light Replacement

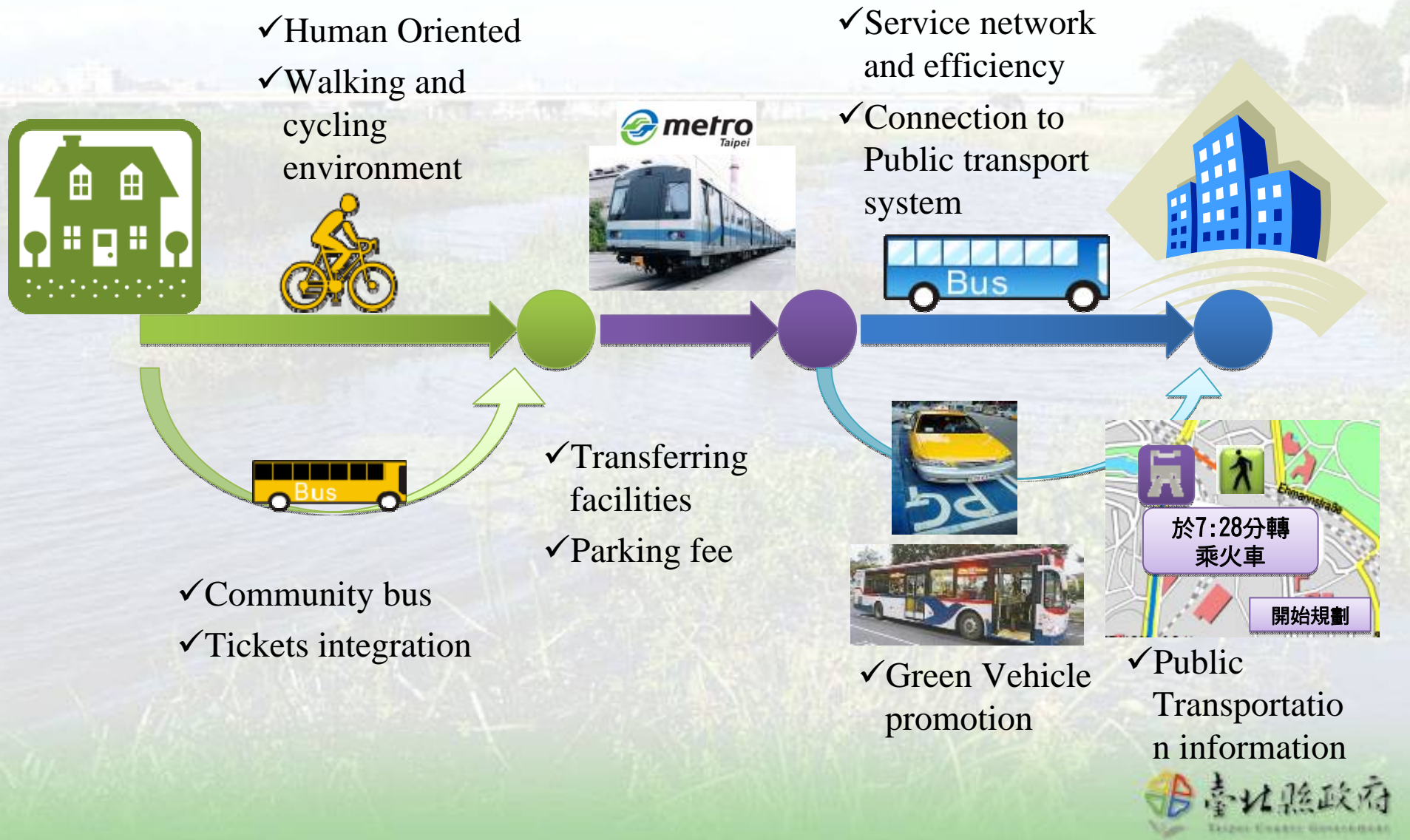


Traffic lights of 171 Roads and 680 intersections have been changed into LED.



- ◆ Established a carpool website since 2008, and cooperate with 12 northern Taiwan local governments to promote carpool system.
- ◆ 9700 people join the member
- ◆ Carbon reduction: 1,277 tons/yr
- ◆ Saving 500,000 liter gasoline/yr

Integrate Public Transportation Network



MRT System in Taipei County



Taipei County MRT will increase to 151 km in 2021
Public transportation usage increase to 40% in 2016 , and 50% in 2026

**Green Transportation
for all citizens**

Green Transportation by Bicycle and Walking

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**259 km of bicycle paths in 2009
500 km of bicycle paths in 2011**

Promotion of Low Carbon Vehicles: Hybrid Bus

◆ Subsidy for Hybrid Bus in Taipei County



Low-Carbon Vehicle



- ◆ Purchasing official vehicle with LPG/gasoline dual fuel system.
- ◆ Subsidies for taxis changing to LPG dual system.

Public Bicycle Rental System



- ◆ Established a “Public Bicycle Rental System” since 2008, set up 15 bicycle rental stations in the Xinban low carbon demonstration zone, and provide 270 bicycles for citizens’ free use

Promotion of Low Carbon Vehicles: Electric Motors

- ◆ 2016 : 12%→2026 : 50%
- ◆ Electric Buses
- ◆ Electric Motorcycles
- ◆ Electric Automobiles
- ◆ Charging station network



Renewable Energy: Solar

Photovoltaic facilities

◆ Renewable Energy percentage

2008: 2.5% -> 2016: 5%

- ◆ 31 Solar PV Demo points with total 371 kW
- ◆ Saving 40 kW-hr/yr
- ◆ Reduce 255.6 tons CO₂/yr

Demo Location:

1. 八里北臺光電城 (240kW)
2. 三重市公所頂樓 (15kW)
3. 新莊市公所頂樓 (15kW)
4. 中和市公所頂樓 (20kW)
5. 坪林茶業博物館屋頂 (6kW)
6. 板橋第一運動場屋頂 (6kW)
7. 北縣14所低碳校園 (58kW)
8. 11座太陽能候車亭(11kW)



Roof PV



Solar PV Bus stop

Renewable Energy: Solar and Wind Power Charging Station

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- ◆ Construct 10 electric motorcycle charging station (15kW) in 2010



Power Generating Incinerator

- ◆ 500 million kW/year in Taipei County
- ◆ Reduce 319,000 tons CO₂/yr



Website for Second Hand Furniture Exchange

- ◆ Free second-hand furniture for helpless families
- ◆ 1,515 pieces of second-hand furniture move to new homes
- ◆ Benefit to 1189 people and 300 families
- ◆ Reduce 43 tons waste
- ◆ Volume reduction: approximately 3363 m³
- ◆ Carbon reduction: 115 tones



Disable Disposable Tableware

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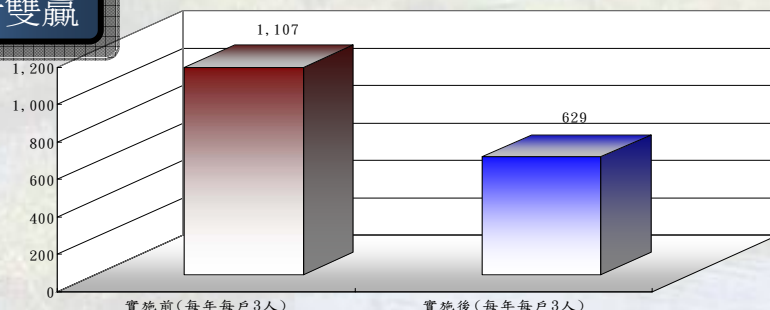
- ◆ Public department demonstration
- ◆ Cooperate with neighborhood stores and restaurants
- ◆ Reduce waste and carbon emission



Pay As You Throw

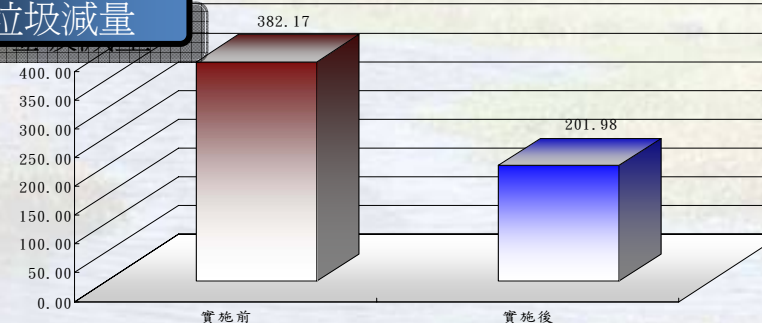
- ◆ Waste Reduce 200 ton/day (-47%)
- ◆ Resource Recycle increase 5 ton/day (+12%)
- ◆ Food Waste Recycle increase 65 ton/day (+192%)

民眾與政府雙贏



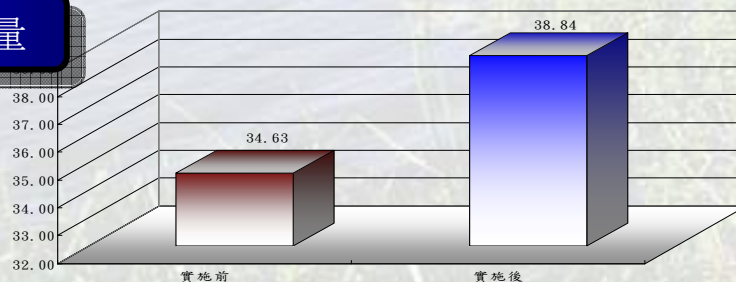
- 民眾：每年每戶(三人)減少**478元**垃圾費支出
- 政府：減少垃圾量、人力、機具維修成本

垃圾減量



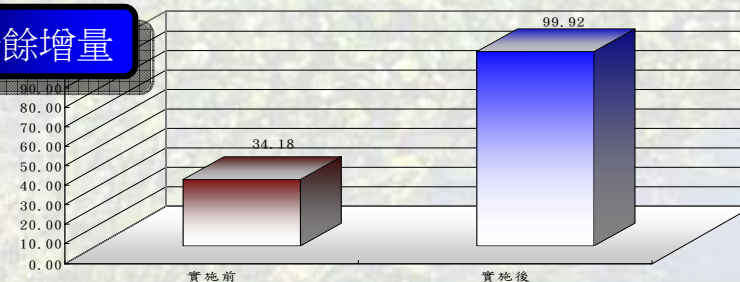
- 推動前：382.17公噸/日
- 推動後：201.98公噸/日
- 減量率：**47%**

資源回收增量



- 推動前：34.63公噸/日
- 推動後：38.84公噸/日
- 增加率：**12%**

廚餘增量



- 推動前：34.18公噸/日
- 推動後：99.92公噸/日
- 增加率：**192%**

Low Carbon Travel(1)

Create a New Travel Model and Low Carbon Demonstration Township

坪林低碳旅遊（臺北縣坪林鄉）

第一座低碳旅遊中心誕生了！臺北縣於坪林鄉首創了低碳旅遊中心，並創新推出低碳旅遊行程。透過各項的低碳措施及行為，讓民眾能體驗低碳旅遊的樂趣。



雙溪雙鐵低碳遊（臺北縣雙溪鄉）

臺北縣雙溪鄉推出利用鐵路接駁列車、鐵馬車道特色「雙溪雙鐵低碳遊」，讓民眾利用雙鐵享受雙溪鄉豐富自然、人文景觀及田園特色。



Low Carbon Travel(2)

Create a New Travel Model and Low Carbon Demonstration Township

一般旅遊模式每人排碳23公斤
低碳旅遊模式每人排碳4.55公斤

低碳旅遊模式搭配碳匯券每人排碳**0**公斤
民眾使用碳匯券消費，除了可以換取等值商品，並由店家提撥經費為民眾植樹固碳。



共乘前往 交通管制 低碳接駁



Low Carbon Travel(3)

- ◆ Increase Travel population
- ◆ Create Economic Benefits
- ◆ Increase Employment rate
- ◆ Reduce CO₂ Emission

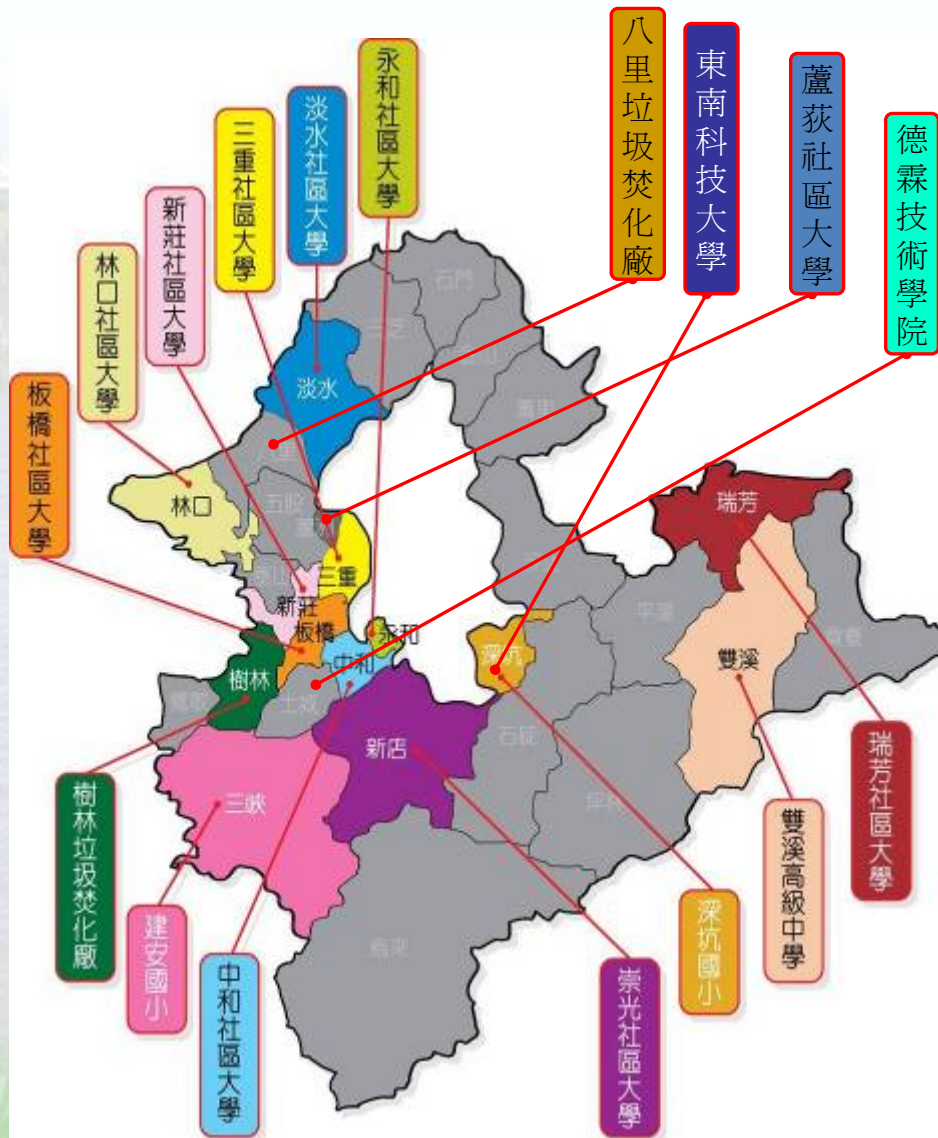


Shuangxi Township Low Carbon Travel



Pinglin Township Low Carbon Travel

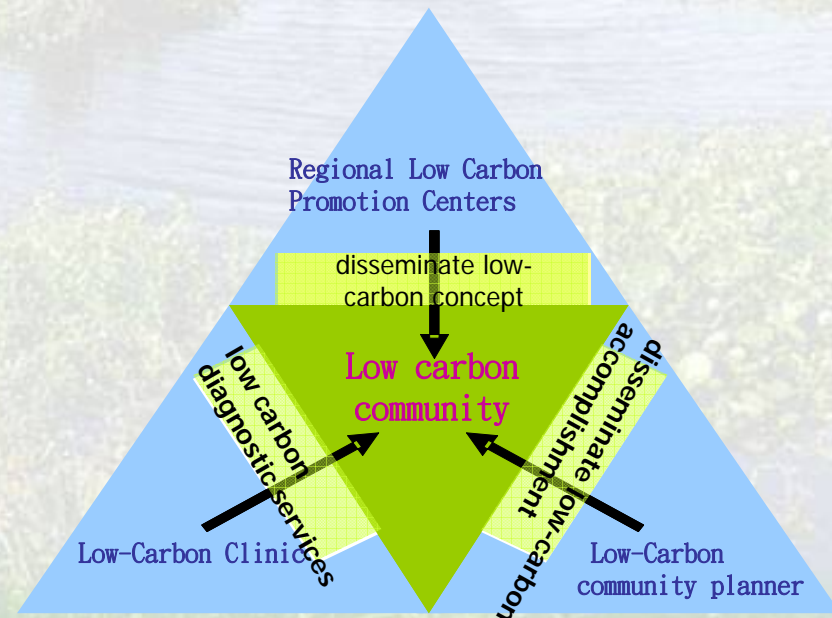
Established 17 Regional Low Carbon Promotion Centers



- ◆ **over 1400 people attend to low carbon courses**
- ◆ **Create 33 Low-Carbon community planner from the courses**

Community Participation: Low Carbon Demonstration Community(1)

- ◆ Build low carbon communities with the growth rate 5% per year
- ◆ Initiate “Low carbon community labeling certificate system”



Community Participation: Low Carbon Demonstration Community(2)

◆ 5 Demo Communities

- ◆ carbon Reduction (Aug. 2008~Apr.2009): 113.2 tons
- ◆ Saving 178000 degree (kW/hr) electricity
- ◆ Saving NT\$750000/yr



Rainwater Collection

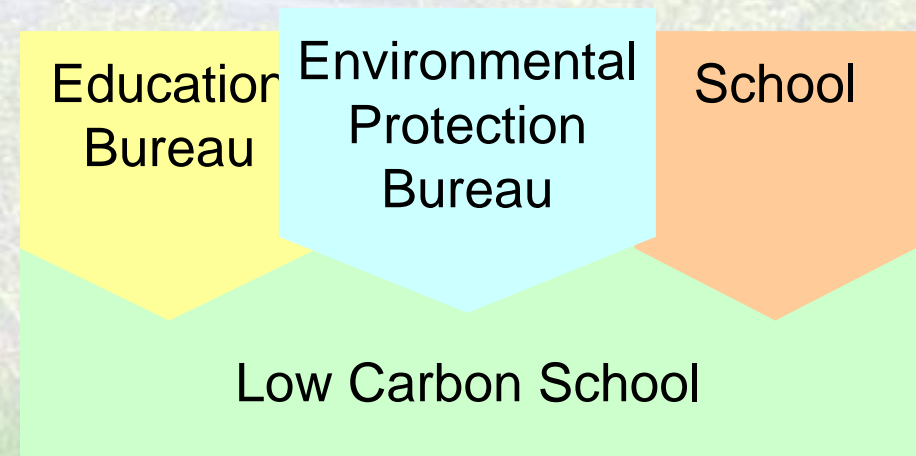
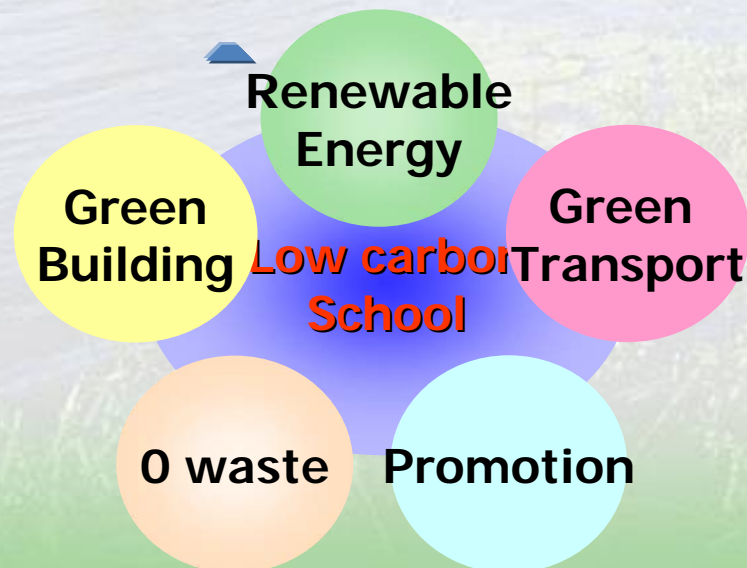


Street light replace from Mercury type(400W) to LED type(100W)

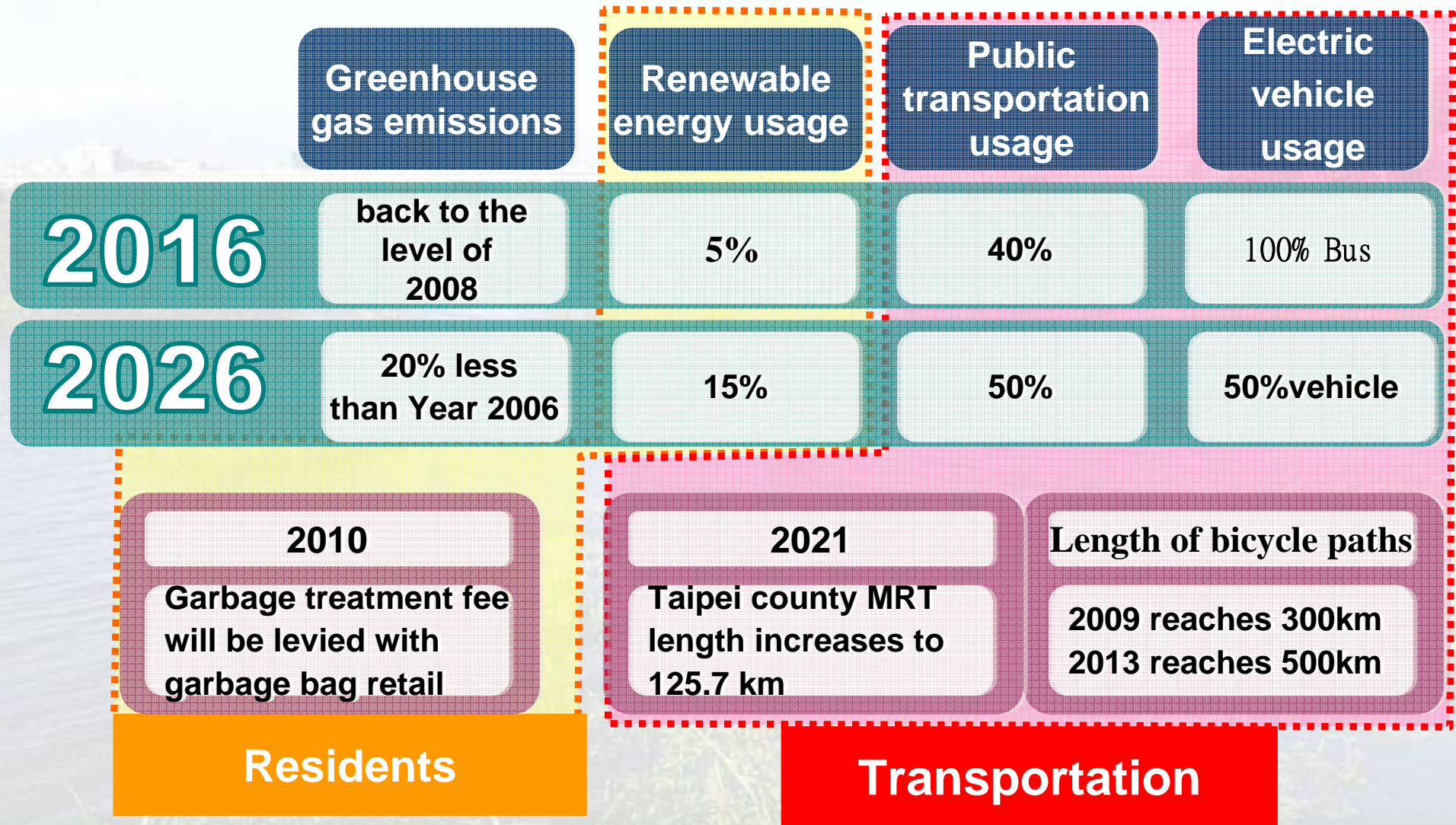
Energy Saving
Promotion in
Community

Low Carbon School

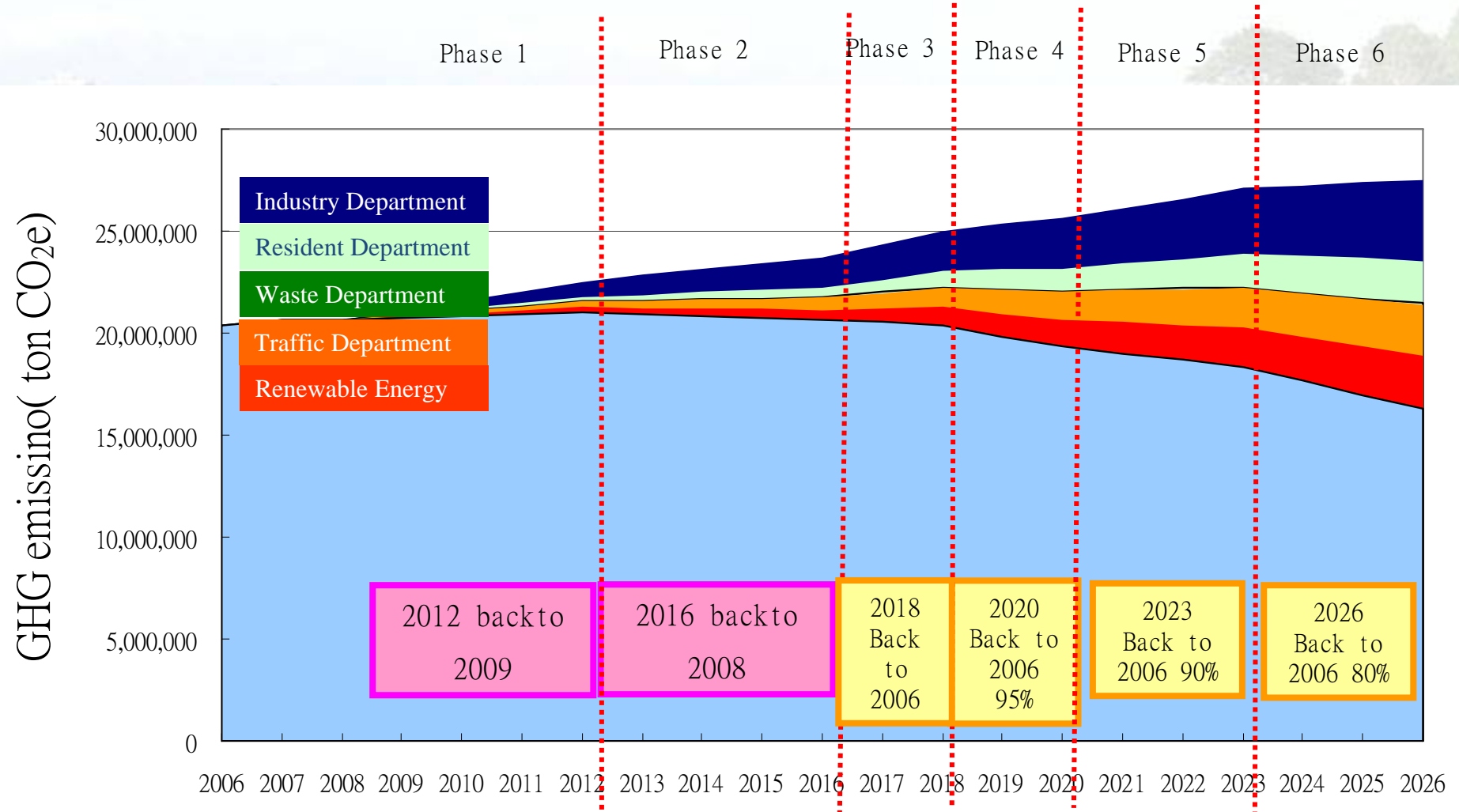
- ◆ **5 Aspects: Renewable Energy, Green Building, Zero Waste, Green Transportation and Low Carbon Promotion**
- ◆ **Assist to improve energy saving and pass the certification**
- ◆ **Build 30 Low Carbon Schools in 2010**



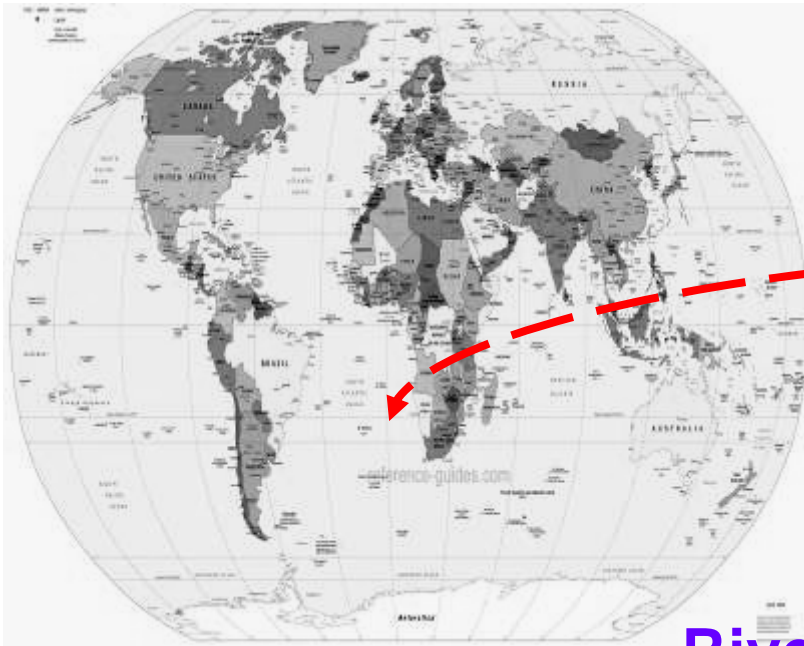
Goals for Low Carbon Taipei County



GHG Emission Reduction Stage Goals



Internationalization



River

Beyond Singapore

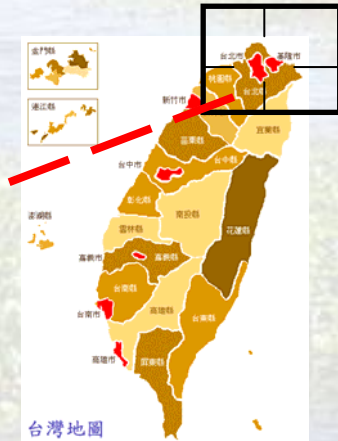
Garden City

Low Carbon Lifestyle

Low Carbon
Xinbei City

Anti-dirty by
All Citizens

Pay As You
Throw





**Taipei County is on the way to be
a Low Carbon Eco-city .**

- ◆ carbon reduction: 113.2 tons/yr
- ◆ Saving 178,000 degree (kw/hr) electricity and NT\$ 750,000/yr