Building Low Carbon and Eco-efficient society at Local level: the Case of Dalian

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1. Profile of Dalian

Dalian lies on the Liaodong peninsulia, adjacent to the Bohai Sea Rim region, with a population of 6 million people. Dalian covers an area of about 12,500 sq.km, which is divided into six districts, three cities , and one county. Dalian is the most convenient gateway to the Northeast Aisa region.



Brief background

GDP per capita: 51624 RMB

In 2001, Dalian was awarded the world's Top 500 City in Torino, Italy,

- Per capita urban greenery area reaches 12.3 square meter
- the greenery coverage ratio in the urban districts post 44.5 percent.
- Dalian has set the goal of transforming Dalian into a ecofriendly and green city, through the using of new energy and energy efficient technology.

Dalian is shifting its industry structure from heavy industries to service and knowledge based economy by attracting new FDI from IT sector

Energy consumption

Dalian maintains double digit economic growth while keeping the energy density declining



Scenarios analysis for Dalian City

To prepare a summary of a quantitative scenario study on the establishment of a sustainable low-carbon society in Dalian.

To create awareness among local government and the community urgent and decisive actions to be taken to realize a low-carbon green growth.

To create a strategic partnership through biliteral and multiliteral cooperation with internatioanl organization like UNESCAP and NEASPEC.



Final Energy Demand (By End user)

Final Energy Demand by End User (Million TCE)



Final Energy Demand (By Fuel)

Final Energy Demand by Fuel (Million TCE)



Power Supply (By Fuel)

Power Supply by Fuel (Million TCE)



CO₂ Emission of Target Year

CO2 Emission of Target Year (Million Ton)



Eco-efficient partnership Program: Near Term Reductions + Longer Term Target

To build capacity by sharing information, experiences, and best practices

To implement a eco-efficient and climate action process to assist the Cities in implementing policies towards becoming a low carbon city.

To facilitate municipality, enterprises, research institutions and NGO engagement.

Through these partnerships, all stakeholders are able to leverage its relationships with each other and especially with government agencies