China, as well as the whole world, is facing the pressure of population growth, and the attendant problems of urbanization and resource depletion, environmental pollution and so on. This design attempts to explore solutions to these problems as a possible way to:

Create a SUSTAINABLE ECO-TOWN in Qipanshan, China.

The site of design, Qipanshan, is located at the edge of a city in northeast of Shenyang, with the status quo of farmland, forests and villages. Because of the urban renewal of the inner city of Shenyang, Shenyang Conservatory of Music will be relocated to this area from downtown, followed by a large population and their requirements of services, commerce, housing and so on. The exploration of the design of this typical area may inspire the similar case of new urbanization.

The answer to achieve sustainable is technology.

The use of technology is based on the understanding of Eco-town System. Sustainable planning and design control and guide the purpose of planning objectives by influencing the ecological factors (Energy, Water, Material, Air, Land and people’s activities, etc.). The role from the systems, in the planning and design can be divided into six subsystems:

Energy: On the one hand to increase clean energy supply, on the other to reduce energy consumption of new buildings through technology.

Water: The rational use of natural water systems, rainwater collection, gray water recycling reuse.

Material: Green construction with selected material, waste separation and recovery of local use.

Air: According to regional climate characteristics, to simulate the wind environment of the built environment, as which a basis to adjust the layout to improve the conditions for natural ventilation, and then to reduce dependence on artificial ventilation.

Land: Improving land use efficiency, to retain the existing woodland as much as possible, to improve the rate of urban green space, and create a new garden city.

Immaterial: Inherit local traditional lifestyle and traditional culture of sustainable elements in the sustainable cultural elements.

The independence of each subsystem has a certain influence and interact with each other but together to form a complete organic ECO-TOWN SYSTEM. And spatial planning is the