

# **THE RELATIONSHIP BETWEEN ROPEWAY CONSTRUCTION AND ENVIRONMENT PROTECTION**

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There are a great deal of beautiful scenic spots and famous mountains and rivers in China including 119 National Major Scenic Spots and 256 Provincial Major Scenic Spots. The living standard of Chinese people has been improved a lots as the reform and opening-up Policy is caring out. This also promote the tourist trade significantly and make a great development to the industry of China passenger aerial ropeway which started at the end of 70s' and has rapidly increased at the speed of 20 each year since 1990. Up to the end of 1998, more than 230 various kinds of ropeways have been constructed in China. These ropeway distributed at many well-known scenic spots, such as Huangshan mountain, Jiuhua mountain, Emei mountain, Huashan mountain, Wutai mountain, Beigaofeng in Hangzhou, Hengshan mountain, Zhongshan mausoleum in Nanjing, wild-elephant valley in Xishuangbanna, Badaling Great Wall in Beijing, etc, and all of them brought economic and social benefit in return. It is very different from the ropeway in Europe country that most (90%) of the ropeway in China is built in scenic spots as transporting and traveling tool, and only 10% of them is built in ski area. The environment protection was paid particular attention at the earliest time. The practice indicated that the ropeway construction in China is advantageous to the development of scenic spots.

## **The advantageous effect of ropeway construction to environment protection**

- a. Constructing ropeway will reduce environmental pollution and protect the beauty of the scenic spot. The usage of vehicles can be limited effectively after the ropeway is put into operation and this can decrease exhausted gas and reduce the pollution to the air.
- b. The travelling will be sped up when tourists take ropeway for sight seeing. As the staying time becomes short, the reception pressure will be alleviated, and the production of daily garbage decreased. This is a significant improvement in environment quality.

- c. Building ropeway in the area of scenery can improve the condition of travel and the service. With the help of ropeway, new spot can reach easily and the ranges of travel can be broaden and form new and convenient tour route. Although the number of tourists increases year by year, the pressure to reception is not heavy thanks to the wideness of tour area and the rationality of tour route.
- d. Taking ropeway is a solution for people who suffered from difficulty in travel, such as the old, the children, the deformity or the ill. Taking ropeway for tour is a new concept which is more suitable to the modern life compared with the old manner of travel on foot. Constructing ropeway also can enhance the reputation of a scenic spot since it can attract more people and can provide speed and comfort.
- e. The ropeway also can be used to transport construction goods and materials and daily necessities. This provides great convenience for tourists and staff, meanwhile prevents the destruction of transportation to the nature.
- f. Construction of ropeway can accumulate funds for the reconstructing and protection of the scenic spot. Most of scenic spots in China is constructed and maintained on civilian financing. The ropeway not only provides service to tourists but also is a major business of this area since most of the investment can be returned within 3 to 5 years and benefits the owner and investor very much.

### **Major environmental protection measures taken in construction ropeway at scenic spot**

The plan of constructing ropeway in the National or Provincial scenic spot have to be appraised and demonstrated by experts from Environmental Protection Authority department and can be put into practice only after authorization. Environment protection is always the greatest consideration during selecting the route, building the station and towers and constructing the ropeway.

- a. The route and the site of station should be concealed and avoid the major scenery. For example, the Badaling ropeway located in Beijing which constructed after evaluation by experts of National Department of Preservation of Cultural Relics, the top station built

in a cave and the line is concealed very much. The line of Golden Top ropeway in Emei Mountain in Sichuan Province avoided the major scenery and the ascending way.

- b. The size of station should be as small as possible and the pattern of station should be suitable with the view around.
- c. Do everything possible to avoid felling trees and must not cut down even one ancient tree. This rule should be observed when select the location and the height of tower. Beigaofeng in Hangzhou is a well-known scenery where the highest tower is 35 meters so that the ropeway passes above the trees. The height of tower in Putuo Mountain is up to 39 meters to protect an ancient tree standing at the scheduled route. All the towers are painted deep green or grass green to match with the scenery around.
- d. Place garbage bag in the cabin and garbage box at the station. All the garbage at the top of the mountain must be transported to the bottom every day.
- e. The electrical motor of drive unit and reducer is set up at the basement and appropriate measure is taken to reduce noise.
- f. Take effective measures to protect the environment around and prevent possible pollution when the construction is under process.
- g. Clear up all of the rubbish and waste and restore the surroundings to its original condition when the project is accomplished.

### **Construct ropeway and protect environment**

Constructing ropeway conflicts with and meanwhile is consistent with protecting environment. Our practice indicated that lack of the idea of environment protection when building ropeway at scenic spots would spoil the nature which human beings lived with. This behavior blocks the progress of ropeway project and is condemned by everyone. On another hand, if we handle the relationship between them well to push tourist trade go ahead as well as to protect the environment; there is great potential and bright prospect of construction ropeway at the scenic spots in China. It is our heartily wish to cooperate with all the oversea ropeway companies on the basis of mutual benefit and reciprocity to develop the ropeway project and to protect our nature.