

# From Cold War Island to Low Carbon Island: A Study of Kinmen Island

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## ABSTRACT

*Kinmen's military landscape is a legacy to the history of war. Since the abolishment of military administration after the Cold War, Kinmen Island has transformed from a front-line to a tourist-oriented island. Due to the recent opening of relations between Taiwan and China, there has been a large influx of tourists into Kinmen Island to visit its rich ecosystems and the historic battlefields, leading the author to rethink the future management of the island. As Kinmen Island lacks electricity and water resources, the development of renewable energy to render Kinmen a low-carbon island has been identified as the best option. To achieve this goal, the installation of a distributed power system integrated with abandoned military facilities to replace the centralized power plant on the island would benefit development and would represent the core strategy of the low-carbon initiative.*

*Keywords: Centralized Power, Cold War, Distributed Power, Low-Carbon Island, Low-Carbon Measures, Military Installation, Renewable Energy*

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## INTRODUCTION

Kinmen is a small archipelago of two large islands, located approximately 248 km west of Taiwan and 41 km east of mainland China. It was a front line in the anti-Communist struggle during the Cold War, and was the most important anti-communism outpost in this region owing to its critical position (Chen, 2010). During the 43 years of military administration, high-density front lines and military installations were constructed. The large number of high-density front lines and military installations on the islands are rarely seen anywhere in the world. Kinmen's military landscape is a legacy to the history of

war. However, owing to rapid developments in the movement of worldwide political conflict and changes in cross-strait relations, Kinmen has been transformed from a high-alert military fortification to a famous location that attracts many tourists.

## THE CHANGING OF THE ISLAND

In past decades, the atmosphere of military tension in Kinmen has gradually diminished; tourism and the "Three Little Links" (which allow limited postal, transportation, and trade links between several cities in the Fujian province of China and the islands of Kinmen and Matsu of Taiwan) are flourishing. Since 1992, after the

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abolishment of military control, there has been a substantial reduction in the number of troops on Kinmen Island, and therefore some military installations have been abandoned, while many have been temporarily closed, and some have been released by the military for non-military use. These actions have meant that the battlefield scenery is being gradually lost from this world-famous battleground (Chiang, 2007). While the previously-established military constructions and the military landscape are deeply imprinted on the land of Kinmen Island, today, Kinmen Island is open to the public and has become a famous tourist attraction, demonstrating the history of cross-strait confrontation during the War (Chen & Fu, 2010).

Recent climate changes are causing disasters worldwide, leading many countries to actively take action with the aim of slowing down the damage to the ecosystem. The concept of these activities is to plan for sustainable development and recover the damaged ecological environment. Kinmen Island lacks natural and fossil-fuel sources of energy. The transition from military administration to tourism has attracted a large number of visitors to the islands; however, this also largely affects the balance of the established ecosystem and increases energy consumption on the islands. Therefore, development of the islands should focus on the use of natural resources and the cultural environment.

In June 2004, the Kinmen County government published the Strategic Plan for the Sustainable Development of Kinmen, which focuses on maintaining the ecology of the islands and improving the quality of life of their residents. The plan aims to limit economic development in Kinmen based on the bio capacity of the islands, and proposes application of the concept of mutual benefit in solving ecological problems and seeking to attain sustainable development. If the goals are achieved, this will render Kinmen Island a model low-carbon island.

## TARGET OF ENERGY-SAVING IN KINMEN ISLANDS

In response to climate change, the Taiwan government announced at the National Energy Conference that innovative energy planning will reach the target of 1–3% by 2020, and renewable energy will account for 10% of the national generating capacity, i.e., 7000–8000 megawatts (“The preservation and re-activation of,” 2008). To ensure active participation in the global carbon reduction effort, Kinmen needs to develop a carbon reduction strategy with an ecosystem-based management network. In addition, 2010 was the year to act practically towards “energy-saving and carbon reduction”. Many areas in Taiwan have been chosen as model locations in which to construct low-carbon homes, and Kinmen Island has been selected to be developed as a model low-carbon island.

During the 43 years of military administration, the development of Kinmen was controlled by the military. However, the restrictions imposed have maintained many natural ecological phenomena and cultural unique traditional architecture. After the abolishment of military administration, the process has meant that the high-density front lines and military installations have gradually fallen into disuse, or have even been abandoned. This is a great pity, as these installations are the basis of indelible memories and represent the cultural heritage of Kinmen, and could be transformed into a key resource of the tourism industry in the future. Therefore, a quarter of the island has been designated Kinmen National Park, which is the first National park in Taiwan proposed in order to maintain the heritage and cultural landscape of the Island and commemorate the battlefields. This also benefits the development of Kinmen as a low-carbon island. As passenger and freight traffic has increased significantly in Kinmen, it is hoped that the development plan presented in this paper can inspire the integration of the unique resource of military installations on the islands to develop Kinmen as a low-carbon island. By applying the approach proposed in

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