In Taiwan, with regard to energy-saving education to reduce carbon, we face a double problem. Taiwan's energy consumption relies on imports of 98.3 percent, this is the limitations of their own resources, together with the now highly dependent on fossil energy, energy easily by outsiders; the other is a global problem, climate change caused by disasters, everyone has the opportunity to be affected. Both to resolve the key to mankind is to control the use of fossil fuels, so that the concentration of atmospheric carbon dioxide rise and slow down the changes caused by global warming, this is the significance of energy conservation to reduce carbon.

In this, we will describe the path of the application of mathematical model of energy-saving lamps in the RFID on the theory, we can assume that each receiver are street-lamp, and the assumption that each is a steam locomotive or transmitter, in accordance, such as RFID can be used as a precise, and things tracking, certification, and re-call to respond to application-specific characteristics, such as to calculate the transmitter and receiver above the exact distance to change the brightness of street lamps the size of the road!

By mathematical software MATLAB, we can write out a road suitable for use with the surrounding street people, things, automatically tracking and statistics, and can be found in every street-lamp light the size of the case! Through the application of the case believe that the management of road lighting in the development of a degree of contribution.

Keywords : RFID、Mathematical Model、Street Light Energy Conservation、taiwan