

「校際傑出學術論文授權暨發表會」

論文摘要表

研究生(中文姓名)	邱垂煥
研究生(英文姓名)	Chui-Huan Chiu
論文名稱	教室耗能設備碳盤查之系統建構與經濟效能分析
英文論文名稱	An analysis on systems establishment and economic efficiency with carbon inventory for equipment of classroom energy consumption
指導教授	王貳瑞
指導教授(英文姓名)	Earl-juei Wang
學位類別	碩士
校院名稱	屏東科技大學
系所名稱	工業管理系所
學年度	99
語文別	中文
關鍵詞：節能減碳、教室、碳盤查計算器	
英文關鍵詞：Energy saving and carbon reduction, classrooms, carbon inventory systems	

中文摘要

為解決溫室氣體減量所形成的氣候變遷問題，二氧化碳排放抑減已經成為台灣未來環境政策之重要議題。能源是溫室氣體最大來源，因而成為節能減碳的主要目標。校園是學生生活與學習的場所，在整個節能減碳政策推動環節是不可忽視的一環。本研究針對校園教室照明與冷氣耗能設備為對象，建構一個具有經濟效能分析之節能減碳計算器，作為學校管理與學生學習之碳盤查系統工具。利用本研究計算器可估算目前市售教室設備耗能耗碳狀況，並可與資料庫系統連結，提出改善可行性方案，達到節能減碳目標。

英文摘要

Given the greenhouse effects that deteriorate the climate change problem, the carbon oxide (CO₂) emission reduction is becoming an important future environmental issue in Taiwan. As energy generates the most part of greenhouse effects, its consumption becomes the main target of energy saving and carbon reduction. Campus plays a role of rudimentary rings in the whole energy saving and carbon reduction policy due to its function for the place of students' learning and livings. Regarding to the lighting and air conditioning equipment, this study constructs a functional calculator with carbon inventory systems and economic analysis for the use of energy saving and carbon reduction in campus. The constructed systems embodies various functions such as connecting the data-based systems of market lighting and air conditioning equipment, estimating the current status of energy and carbon reduction, and analyzing the feasibility of improving alternatives.