國立屏東科技大學

National Pingtung University of Science and Technology

2019 年溫室氣體政策制定 2019 Greenhouse Gas Policy Development

> 中華民國 108 年 1 月 6 日 January 6, 2019

> > 1

第一章 組織概況 Organization Overview

1.1 前言 Preface

近年來氣候變遷已是不容忽視的環境議題,人類的活動嚴重地影響地球氣候,溫室氣體迅速地排放到大氣中導致地球平均溫度上升,為達到綠色永續校園環境節能減碳之永續發展目標,藉由校園建置能源查核及管理機制種種措施,降低能源使用量,進而減少溫室氣體排放,提升教育場域之環境教育形象,有效達成校園溫室氣體減量之目標。建立溫室氣體減量政策深植於校園環境教育進而推廣於社會,為我國校園溫室氣體減量工作貢獻一份心力。

In recent years, climate change has become an environmental issue that cannot be ignored. Human activities have severely affected the earth's climate, and the rapid emission of greenhouse gases into the atmosphere has caused the average temperature of the earth to rise. This is to achieve the sustainable development goal of energy saving and carbon reduction in a green and sustainable campus environment

1.2 學校簡介 NPUST Profile

本校創立於日治時代的大正十三年(1924),初名高雄州立屏東農業補習學校;後因規模擴大,於昭和三年(1928)易名為高雄州立屏東農業學校;1945年高雄州立屏東農業學校更名為臺灣省立屏東農業職業學校。

1954 年臺灣省政府於屏東創設臺灣省立農業專科學校。1963 年臺灣省立屏東高級農業職業學校升格五專並與臺灣省立農業專科學校合併,仍名為臺灣省立農業專科學校。1964 年更名為臺灣省立屏東農業專科學校。彼時,與臺灣大學、師範學院(臺灣師大前身)、臺中農學院(中興大學前身)及臺南工學院(成功大學前身),並稱臺灣五大學府,為揚譽海外的農耕隊和國內各行各業培育了無數菁英,既為國家穩固了邦交,更為臺灣經濟的起飛奠下了厚實的基礎。

爾後,本校於 1991 年升格為國立屏東技術學院。與北部的臺灣工業技術學院及新成立的雲林技術學院,是當時全國技職教育體系中唯三的技術學院;1997 年又與臺灣工業技術學院、雲林技術學院率先升格為國立屏東科技大學。在臺灣技職教育體系日趨完整的每一階段,本校皆居於龍頭之位。

此外,本校於 1986 年遷入現在的老埤地區,倚大武山,傍東港溪,校地之廣(298.3 公頃),居全國之冠;校舍依地勢規劃而建,極具淳樸特色,且視野遼闊,優美如畫,校景之好,媲美國家公園,致有「國家公園大學」之美稱,是學生培養專技、陶冶人格、強健身心的最佳天地,也是教師最理想的研究教學環境。

NPUST was established as the "Kaohsiung State Pingtung Extension School of Agriculture" in the 13th year of the Taishō period during the Japanese Colonial Era (1924). In 1954, after the nationalists (KMT) had taken over the rule of Taiwan from the Japanese, the school was renamed as the Taiwan Provincial Institute of Agriculture. At that time, it was among the best of Taiwan's vocational schools, training countless elites and becoming a foundation for Taiwan's economic boom.

In 1991, the school reorganized to become a vocational college and, together with the National Taiwan Institute of Technology, was among the top two technical institutions of higher learning in the country. In 1997 the vocational college was upgraded to a university of science and technology, and occupied a leading position among vocational education institutions in Taiwan.

In 1990, the school campus was relocated to a vast 298 hectare property in Neipu Township next to Dawu Mountain and the Donggang River. Ranked top in the nation, the campus has earned NPUST the reputation of "National Park University" and provides an excellent place for students to cultivate their skills and personal qualities while strengthening their bodies and minds—it is also an ideal place for faculty members to carry out their research and educational activities.

學	校	名	稱	國立屏東科技大學
校			長	戴昌賢
教	職員	生人	數	12,865 人
學	校	地	址	920 屏東縣內埔鄉學府路 1 號
聯	絡	電	話	08-7703202

1.3 校園溫室氣體減量政策 Campus greenhouse gas reduction policy

地球氣候與環境,因遭受溫室氣體的影響,正逐漸地惡化中。我們作為地球公民的一份子,為善盡學校之環境責任致力能(資)源減量與節約並持續改善,以達永續校園,國立屏東科技大學將進行溫室氣體盤查作業,以確實掌握溫室氣體排放情形。後續將依盤查結果,做為本校進行溫室氣體自願減量相關計畫之參考,以推動持續有效的溫室氣體排放管理工作,並以每年減少溫室氣體 1%為目標。本校環境政策如下:

The earth's climate and environment are gradually deteriorating due to the influence of greenhouse gases. As a member of the global citizens, we are committed to reducing and conserving resources in order to fulfill our campus's environmental responsibilities and continue to improve, so as to achieve a sustainable campus. National Pingtung University of Science and Technology will conduct a greenhouse gas inventory operation to ensure that the greenhouse gas emission situation. The follow-up investigation results will be used as a reference for the campus's voluntary greenhouse gas reduction plans to promote continuous and effective greenhouse gas emission management, and to reduce greenhouse gases by 1% every year. The campus environmental policy is as follows:

- (1) 訂定並實施國立屏東科技大學環境保護暨節約能源實施要點。 Formulate and implement key points for environmental protection and energy conservation of the National Pingtung University of Science and Technology.
- (2) 節約能源提案及改善獎勵機制, 激勵教職員生落實資源回收工作與競賽, 成績優良獲 勝單位或個人可獲得獎金及獎品。垃圾減量以降低焚化垃圾所產生的間接溫室氣體的排 放。

Proposals for energy conservation and improvement of the reward mechanism, encouraging faculty and students to implement resource recycling and competition, and the winning unit or individual with excellent performance in waste battery recycling can receive bonuses and prizes. Waste reduction to reduce indirect greenhouse gas emissions from incineration of waste.

- (3) 推動節約能源管理制度,並建立節能措施之空調溫度調控與照明開關。 Promote energy conservation management system, and establish energy-saving measures for air conditioning temperature control and lighting switches.
- (4) 推動整體節約能源教育宣導活動,開設節能、環保通識課程,加強宣導愛惜能源與 永續利用之觀念。

Promote overall energy conservation education and publicity activities, open energy conservation and environmental protection general education courses, and strengthen the promotion of the concept of cherishing energy and sustainable use.

- (5) 優先採購符合節能標章、環保標章或省水標章之用電、用水設備、器具及其他事務性產品。空調與冷凍設備採用環保冷媒,以減少碳氟化合物的釋放。 Preferential purchase of electricity, water-using equipment, appliances and other business products that meet the energy-saving mark, environmental protection mark or water-saving mark. Air conditioning and refrigeration equipment use environmentally friendly refrigerants to reduce the release of fluorocarbons.
- (6) 新建、增建、改建或修建工程,採節約能源之規劃設計及建議設置再生能源設施, 以節約能源及提高能源運用,減少尖峰用電需求。藉由校園內的自建綠色能源將會 減少外購電力所間接產生溫室氣體的排放。 For new construction, addition, reconstruction or construction projects, planning and design of

For new construction, addition, reconstruction or construction projects, planning and design of energy saving are adopted, and renewable energy facilities are recommended to save energy and improve energy use, and reduce peak electricity demand. By means of the self-built green energy on campus will reduce indirect greenhouse gas emission generated by purchased electricity.

- (7) 電力系統、空調系統、電熱飲水、照明設備、抽、排風扇、用水設備、事務機器、電梯設備節約用電具體改善措施及公務車管理。
 Power system, air conditioning system, electric drinking water, lighting equipment, pumping, exhaust fans, water equipment, office equipment, elevator equipment, specific improvement
- (8) 全校區推動生活汙水回收系統,回收雨水、廢水再利用;加強綠化減碳,澆灌植栽。 The whole campus promotes a domestic sewage recycling system to recover rainwater and waste water for reuse, strengthen greening and carbon reduction, and irrigate plants.

measures and management of official vehicles.

(9) 全校區推動電動公車、電動機車與腳踏車為校園移動交通工具。宣導共乘制度,以降低通 勤時所所間接產生溫室氣體的排放。

The whole campus promotes electric buses, electric scooters and bicycles as mobile transportation vehicles on campus. Promote the ride sharing system to reduce indirect greenhouse gas emissions during commuting.

1.4 校園溫室氣體減量聲明 Campus Greenhouse Gas Reduction Statement

國立屏東科技大學

National Pingtung University of Science and Technology 溫室氣體盤查自願減量宣言

Declaration on Voluntary Reduction of Greenhouse Gas Inventory

地球氣候環境的變遷,因溫室氣體的排放,正日益惡化。為善盡地球公民的責任,及善盡 大學的社會責任,國立屏東科技大學進行溫室氣體現場盤查作業,以確實掌握溫室氣體排放情形 以作為本校進行溫室氣體自願減量相關計劃之參考,並推動持續有效的溫室氣體排放管理工作。

The changes in the earth's climate and environment are getting worse due to the emission of greenhouse gases. In order to fulfill the responsibilities of a global citizen and fulfill the social responsibilities of the university, National Pingtung University of Science and Technology conducts on-site greenhouse gas surveys to accurately grasp the greenhouse gas emissions as a reference for the campus's voluntary reduction of greenhouse gas related plans and promote continuous and effective management of greenhouse gas emissions.

國立屏東科技大學中華民國 108 年 01 月 06 日

第二章 組織邊界盤查 Organizational boundary check

2.1 學校組織 NPUST organization

國立屏東科技大學組織系統圖(109-1學年度)



2.2 學校邊界範圍 NPUST boundary



圖一、國立屏東科技大學平面配置圖

2.3 學校組織邊界 NPUST organization boundary

國立屏東科技大學參考 ISO 14064-1 標準與 WBCSD/WRI 溫室氣體盤查議定書之要求,依控制權法,定義本校盤查之組織邊界範疇為:行政單位、管理學院、工學院、人文學院、獸醫學院、圖書館、學生宿舍、體育館、學生社團活動中心及附設幼兒園等各大樓之教學、研究及活動。

National Pingtung University of Science and Technology refers to the requirements of the ISO 14064-1 standard and the WBCSD/WRI Greenhouse Gas Inventory Protocol, and in accordance with the Control Law, defines the organizational boundaries of the school's inventory as: administrative unit, college of management, college of engineering, college of humanities, and college of veterinary medicine, library, student dormitories, gymnasium, student club activity center and attached kindergarten and other buildings for teaching, research and activities.