

THE 填報的問題	架構	項目	說明	回覆資料彙整
University floor space	7.3.2 SDG7 經濟適用的清潔能源	大學占地面積	大學建築的佔地面積 (單位：平方公尺)	● 量化資料： 765253 單位：平方公尺
Does your university as a body provide direct services to local industry aimed at improving energy efficiency and clean energy (energy efficiency assessments, workshops, research renewable energy options)	7.4.3 SDG7 經濟適用的清潔能源	工業能效服務	向當地工業提供旨在提高能效和清潔能源的直接服務(能效評估、研討會、研究可再生能源)	● 量化資料： free, paid ● 質化資料 Qualitative material 本校設置「智慧綠能研究中心」，以整合本校綠能研究資源、提供工商企業能源技術服務等。 The university has set up a "Intelligent Green Energy Research Center" to integrate the University's green energy research resources and provide energy technology services for enterprises. ● 相關法規及佐證資料 https://sgcecenter.nuu.edu.tw/p/412-1071-4827.php?Lang=zh-tw
Does your university as a body provide assistance for start-ups that foster and support a	7.4.5 SDG7 經濟適用的清潔能源	支持低碳創新	為促進和支持低碳經濟/技術的初創企業提供幫助	● 量化資料： Yes ● 質化資料 NUU has an "Intelligent Green Energy Research Center", which integrates the school's green energy technologies/research resources and can provide low-carbon energy technology services for start-ups. ● 相關法規及佐證資料

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low-carbon economy/technology?				● https://sgcecenter.nuu.edu.tw/p/412-1071-4827.php?Lang=zh-tw
Does your university as a body inform and support government in clean energy and energy-efficient technology policy development?	7.4.4 SDG7 經濟適用的清潔能源	支持制定清潔能源技術政策	為政府制定清潔能源和節能技術政策提供信息和支持	● 量化資料： national ● 質化資料 Qualitative material The government had set clean energy and energy-saving technology policy, and NUU strongly supports this policy and has an executive team for propagating and promoting; additionally, NUU has a Department of Energy, all professors are devoted to clean energy and energy-saving researches/technologies. Moreover, NUU has an Intelligent Green Energy Research Center for providing the services of clean energy, electricity storage, fuel cell, bioenergy, and urban mining. ● 相關法規及佐證資料 https://em.nuu.edu.tw/var/file/29/1029/img/424/132132259.pdf http://www.energy.nuu.edu.tw/ https://sgcecenter.nuu.edu.tw/
Does your university as a body have an energy efficiency plan in place to reduce overall energy consumption?	7.2.4 SDG7 經濟適用的清潔能源	降低能源消耗的計畫	制定合理的能源提效計畫以降低整體能耗	● 量化資料： Yes ● 質化資料 Qualitative material 一、本校在二坪山校區於 108 至 110 年間進行高壓電瘦身計畫、太陽能發電計畫、老舊冷氣汰換成變頻冷氣、螢光燈管汰換成 LED 燈具、老舊飲水機汰換與電梯主機汰換成變頻主機...等項目。 From 2019 to 2021 years in Erpingshan campus, the university has carried out projects such as high-voltage power reduction plan, solar power generation plan, replacement of old air conditioners with variable-frequency air conditioners,

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				replacement of fluorescent tubes with LED lamps, replacement of old water dispensers and elevator hosts with variable-frequency hosts, etc. 二、總務處辦理情形：高壓電瘦身計畫每年約節省 20 萬度電，K2、K3 教室更換 LED 燈組每年可節省 1 萬 6 千度電。 The General Affairs Office has carrying out the electricity plan to cut off electricity use by 200,000 kw-h annaully, for example the original lighting sets in Teaching Buildings, like K2 and K3, are replaced by LED to cut the total use of electricity by16,000 kw-h every year. ● 相關法規及佐證資料 「109 年教育部建構智慧低碳校園計畫」結案報告請見 330 佐證資料。 https://drive.google.com/file/d/1LLx0sVVLbAzjgFOXJmE0dfUZRBW7i6AJ/view?usp=sharing								
Total energy used	7.3.1 SDG7 經濟適用的清潔能源	能源消耗總量	以吉焦(GJ)計算的能耗總量	● 量化資料： 單位：吉焦(GJ) <table><tr><th>項目</th><th>108 學年度</th></tr><tr><td>能源消耗總量</td><td>11075400 度 = 39871 吉焦(GJ)</td></tr><tr><td>八甲校區</td><td>6545400 度 = 23563 吉焦(GJ)</td></tr><tr><td>二坪校區</td><td>4530000 度 = 16308 吉焦(GJ)</td></tr></table> 1 度電 = 千瓦時 [kWh] = 0.0036 吉焦 [GJ]	項目	108 學年度	能源消耗總量	11075400 度 = 39871 吉焦(GJ)	八甲校區	6545400 度 = 23563 吉焦(GJ)	二坪校區	4530000 度 = 16308 吉焦(GJ)
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Does your university as a body promote a public pledge toward 100% renewable energy (petitions, meetings, discussions,	7.4.2 SDG7 經濟適用的清潔能源	推廣 100% 可再生能源	承諾推廣 100%可再生能源 *大學在鼓勵其他人向可再生能源邁進方面發揮著重要作用。但僅靠倡議遠遠不夠。本校是否通過收集請願書、與最相關的人(如管理者)召開會議或舉辦活動、進行討論來促進實現該承諾/協議？	Yes ● 質化資料 Qualitative material The College of Engineering and Science has set up a laboratory of new energy demonstration field of flow battery and a green energy demonstration field to provide teachers and students with green energy demonstration, which can also be used as emergency standby power on campus. The environmental education and sustainable development center of the University organized the "2020 Miaoli County Environmental Education volunteer empowerment training course", which included "Energy conservation and carbon reduction and energy management" and "Resource use and circular society" that discussed the limited global energy and resources and								

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events) beyond the university?				the practice of energy conservation and carbon reduction. Students have decorated with "2021 Taiwan energy - clean energy technology innovation implementation competition" award. The "2020 Miaoli County Environmental Education Volunteer Empowerment Training " delivered courses "Energy Engineering" and "Energy Policy" courses.. ● 相關法規及佐證資料 桃竹苗區金牌獎網路公告截圖。 實作場域計畫-綠能示範場域 https://drive.google.com/drive/folders/1Jc_HJyur5pjQZO4p4sv85L14cCQ7hC83O?usp=sharing http://ces.nuu.edu.tw/zh_tw/IP
Does your university as a body have a policy in place for ensuring all renovations / new builds are following energy efficiency standards? (relevant standards to be indicated)	7.2.1 SDG7 經濟適用的清潔能源	符合能效標準的翻新和新建建築	確保所有翻新或新建建築符合能效標準的合理政策 *LEED : http://leed.usgbc.org/leed.html *台灣新建建築節約能源設計標準 : https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=D0070208	● 質化資料 Qualitative material ● Yes 一、目前二坪山校區老舊建築物，如翻新，必符合新建築法規、耐震規定及節能標準。 At present, if the old buildings in Erpingshan campus are renovated, they shall comply with the new building regulations, earthquake resistance regulations and energy-saving standards. 二、八甲校區新建建築物於申請建築執照時，必符合國家建築物相關規定，及節能標準。 When applying for building construction, the new buildings in Bajia campus shall comply with the relevant national building regulations and energy-saving standards. ● 相關法規及佐證資料 1. 台灣新建建築節約能源設計標準 <u>Energy saving design standard for new buildings in Taiwan</u>: https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=D0070208

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				2. LEED https://www.usgbc.org/leed/rating-systems/neighborhood-development?CategoryID=19
Does your university as a body have plans to upgrade existing buildings to higher energy efficiency?	7.2.2 SDG7 經濟適用的清潔能源	提升現有建築的能效等級	制定提升現有建築的能效等級的計劃	● 量化資料： Yes ● 質化資料 Qualitative material 一、於舊建築物改善時，符合節能設備，並增設回收水設備等等。 In the improvement of old buildings, energy-saving equipment shall be met, and water recovery equipment shall be added. 二、本校二坪及八甲兩校區建構屋頂太陽能光電系統達 16,445 m²，年度發電量約全校用電量 33%，係經濟適用且永續之現代綠能。 The solar photovoltaic system on the roof of the two campuses of Erpingshan and Bajia reaches 16,445 m², and the annual power generation accounts for about 33% of the power consumption of the whole university. It is an economical, applicable and sustainable modern green energy. 三、本校游泳池設置 301 片太陽能板及熱泵加熱系統，並獲得政府節能綠廳舍計畫之補助，成為綠能示範游泳池。 The university swimming pool is equipped with 301 pieces solar panels and heat pump heating system, and has been subsidized by the government's Energy-saving Green Buildings Project as a demonstration swimming pool in energy-saving. 四、資訊處建置高效率之綠能機房，新式機房因冷熱通道隔離，降低溫差損失達 4°C；相較傳統機房能源使用率(PUE) > 2，PUE 僅 1.43，節省約 25%之空調耗電。 The information office has built a high-efficiency green energy computer room. The new machine room has isolation between cold and hot channels, thus reducing the temperature difference loss by up to 4 ° C; Compared with the traditional computer room with the PUE > 2, the current PUE is only 1.43, saving about 25% of air conditioning power consumption. ● 相關法規及佐證資料

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				https://em.nuu.edu.tw/p/405-1029-37005,c1839.php
Does your university as a body have a process for carbon management and reducing carbon dioxide emissions?	7.2.3 SDG7 經濟適用的清潔能源	碳減排管理流程	碳管理和減少二氧化碳排放的規劃流程	● 量化資料： Yes ● 質化資料 新建建築物部分，將納入碳管理和減少二氧化碳排放相關規定；未來老舊建築物改善部分，將上開內容納入考量。 The new buildings will be incorporated into the relevant regulations on carbon management and carbon dioxide emission reduction; For the improvement of old buildings in the future, the above contents will be taken into account. ● 相關法規及佐證資料 https://em.nuu.edu.tw/ https://em.nuu.edu.tw/p/412-1029-1839.php?Lang=zh-tw
Does your university as a body undergo energy reviews to identify areas where energy wastage is highest?	7.2.5 SDG7 經濟適用的清潔能源	確定能源浪費	進行能源審查確定能源浪費的最高領域	● 量化資料： Yes ● 質化資料 Qualitative material 本校設有「節約能源宣導與推動小組」，為本校進行能源審查並確定能源浪費的最高任務編組。 The university has an "Energy Conservation Advocacy and Promotion Group" to conduct energy review and determine the highest level of energy waste for the university. ● 相關法規及佐證資料 節約能源推動小組會議 https://drive.google.com/drive/folders/1fl_hD-5Xw0ijgOie9lsYUxfA5-NzK7kR?usp=sharing
Does your university as a body	7.4.1 SDG7 經濟適用的	幫助當地社區提升能效	提供相關項目以幫助當地社區了解能效和清潔能源的重要性	Yes

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provide programmes for local community to learn about importance of energy efficiency and clean energy?	清潔能源			本校環境教育及永續發展中心於今年 109 年 7-8 月辦理「109 年苗栗縣環境教育志工增能培訓課程(120 小時)」，其中即有「能源工程」、「能源政策」課程，講授太陽能、風能、水力能等清潔能源，參與訓練學員共 36 人次。 From July to August this year, the environmental education and sustainable development center of the university conducted the "2020 Miaoli County Environmental Education Volunteer Empowerment Training Course (120 hours)", including topics such as "Energy Engineering" and "Energy Policy" courses that introduce clean energy such as solar energy, wind energy and hydraulic energy. A total of 36 trainees participated in the training. 本校環境教育及永續發展中心於今年 109 年 7 月辦理「109 年苗栗縣環境教育志工增能培訓課程(24 小時)」，其中即有「節能減碳與能源管理」、「資源使用與循環型社會」課程，講授探討全球能源與資源之有限及節能減碳之作法，參與訓練學員共 33 人次。 The environmental education and sustainable development center of the University organized the "2020 Miaoli County Environmental Education volunteer empowerment training course (24 hours)" in July this year, which included "Energy conservation and carbon reduction and energy management" and "Resource use and circular society" that discussed the limited global energy and resources and the practice of energy conservation and carbon reduction. A total of 33 trainees participated in the training. ● 相關法規及佐證資料 https://drive.google.com/drive/folders/1zaUbTSOSPkyRmaKDS5wDg4w9XnB0_Sy7?usp=sharing

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7.2.6 - Does your university as a body a policy on have divesting investments from carbon-intensive energy industries especially coal and oil?	7.2.6 投資高碳產業		擺脫碳密集型能源行業(尤其是煤炭和石油)投資的政策？	No ● 質化資料 NUU has no any investment, so it does not involve carbon-intensive energy industries.