University : National Chin-Yi University of Technology
Country : Taiwan
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[SDGs 17] Partnership for the Goals 全球夥伴

[17.3.8] Please indicate if your university publishes progress against SDG8?

National Chin-Yi University of Technology (NCUT) actively promotes **industrial sustainable development** through collaborations with industry, research initiatives, and educational programs. These efforts align with the university's vision to become a **vital hub for technical and vocational talent cultivation** while addressing global sustainability challenges. NCUT leverages partnerships, green technology applications, and sustainability education to bridge the gap between academia and industry.

NCUT has established a strong foundation for fostering innovation and entrepreneurship in the central region of Taiwan. The university encourages both teachers and students to embrace innovative and entrepreneurial initiatives. Simultaneously, NCUT actively collaborates with local businesses to support their technological advancements and enhance their financial value.

To further promote innovation and entrepreneurship, NCUT places a significant emphasis on improving the quality of education. The university employs various strategies to enhance the effectiveness of students' learning. These strategies include strengthening students' foundational theoretical knowledge and practical skills, ultimately bolstering their domestic and international competitiveness.

NCUT cooperates with Dajia Youth Industrial Park Service Center to promote industrial upgrading of the park and activate industrial development

Huang Zi-Yu, Director of Dajia Youth Industrial Park Service Center, kicked off the meeting and convened industry-government-university tripartite industry-university cooperation to promote industrial upgrading of the park and activate industrial development (NCUT cooperates with Dajia Youth Industrial Park Service Center)

The Dajia Young Lions Industrial Park Service Center of the Ministry of Economic Affairs recently launched a meeting to facilitate industry-university cooperation. Huang, Zi-Yu, director of the service center, chaired the meeting. Hsiung-Cheng Lin, director of the Industry-Academic Operations Office of National Chin-Yi University of Technology (NCUT), led the team to explain this year's project, which marks the beginning of this year's industry-government-academia tripartite collaboration and resource investment for industrial manufacturers. Li, Kun-Fang, chairman of the Dajia Young Lions Manufacturers Association,

and Chen, Sheng-Jian, guidance chairman, were also invited to participate, symbolizing the collaboration between the park manufacturers, the service center, and NCUT.

In addition to basic services such as demand visits, on-site consultation and exchanges, short-term technical guidance, and talent training, the counseling provided to park manufacturers this year also includes in-depth counseling content such as detailed technical guidance and assistance in applying for R&D plans. Through the NCUT team's technology research and development, guidance is provided for industrial upgrading in the park. The service center serves manufacturers and promotes government policies, assisting in matchmaking and establishing trust and communication channels between manufacturers and NCUT, thereby facilitating both parties to reach a consensus on cooperation. It also promotes industrial upgrading of the park through various meetings and opportunities to visit manufacturers, thereby activating industrial development.

Huang Ziyu stated that since 2013, the Dajia Young Lions Industrial Park has been collaborating with NCUT in the industry-university cooperation initiative, fostering a partnership between one university and one Science Park. Over the years, they have assisted enterprises in various service projects, including 385 factory visits and 107 technical guidance sessions. **With the emergence of the carbon era in recent years, reducing energy costs and managing greenhouse gas emissions have become crucial issues.** The service center and the **NCUT industry-university team** are committed to **helping companies achieve their carbon reduction goals and align with international energy transformation trends.**

In 2023, a total of 2 cases were assisted in obtaining applications for value-added subsidies for carbon inventory applications from the Industrial Development Agency of the Ministry of Economic Affairs. It is anticipated that 4 more applications will be submitted for the same subsidy in 2024. Additionally, 4 applications have been made for various subsidies, such as the low-carbon and smart upgrading and transformation plan for small and medium-sized manufacturing industries under the Ministry of Economic Affairs. The approved project funding amounts to NT$26 million, with a total government subsidy reaching NT$11.7 million. The implementation performance has been acknowledged and appreciated by enterprises in the park.

The industry-university conference aims to assist manufacturers in intelligent upgrading and transformation, provide carbon reduction solutions, and offer industrial carbon health inspection services this year. It seeks to promote industrial upgrading and transformation year by year. Through conference communication and the exchange of opinions, we aim to achieve sustainable goals of industrial upgrading and carbon reduction.

Software authorization from the German company OPEN MIND

The professional fields within the NCUT Intelligent Automation Engineering Department exhibit a strong correlation with OPEN MIND's solutions, particularly with the recent introduction of the automated NC programming module (Automation). This department was established to address the increasing demand for talents in smart manufacturing applications. Moreover, it maintains close ties with the industrial landscape of the greater Taichung area, positioning itself as a vital resource for nurturing key talents essential for the smart machinery or smart manufacturing industry.

OPEN MIND, a leading German company renowned for its unparalleled five-axis machining technology worldwide, has authorized the Intelligent Automation Engineering Department of NCUT to provide 50 sets of educational versions of two- to five-axis machining and programming automation development modules, with a total value of up to NT$120 million. This collaboration aims to foster talent for intelligent machinery applications. OPEN MIND's recent software solutions are tailored to meet the needs of customers in smart manufacturing or automated production. By authorizing the Department of Intelligent Automation Engineering, OPEN MIND ensures that its software aligns with the department's curriculum, enabling students to acquire cutting-edge professional knowledge and skills during their studies and nurturing talents that meet the demands of the intelligent manufacturing industry. Moreover, this collaboration establishes an industry-university partnership between the two parties. OPEN MIND donates

software to the department's students and faculty, enabling them to engage in practical applications and research while facilitating communication and cooperation with OPEN MIND.

The collaboration between National Chin-Yi University of Science and Technology's Intelligent Automation Engineering Department and OPEN MIND is poised to drive technological research, solution development, and innovation in the fields of intelligence and automation. Additionally, it presents OPEN MIND with opportunities for market expansion in Taiwan's machine tool and machinery industries. The software provided by OPEN MIND is highly relevant to the department's curriculum, including multi-axis precision machining practical technology, advanced manufacturing practice, and advanced computer digital synchronous simulation analysis courses. It is planned to be integrated into elective courses for juniors and seniors, with an estimated usage by approximately 55 to 110 students per year.

Realization application and opportunity of industrial sustainable development

In the face of severe climate change and sustainable development challenges, blockchain technology and sustainable development issues have received increasing global attention in recent years. In order to promote the integration of blockchain technology and ESG sustainable development, the "**2023 Industry Web3 Digital and Sustainable Development: Blockchain Technology Application and ESG Net Zero Transformation Forum**" was held on July 31 at the Kaohsiung Marriott Hotel

With the continuous development of blockchain technology and the importance of ESG sustainable promotion, how can enterprises start to move towards net zero? How can enterprises obtain assistance from relevant government agencies? How does the industry

combine with Web3 digital technology, and what changes and impacts will blockchain technology bring to business?

Participants participating in this forum will understand that blockchain technology has the potential to change the traditional industrial model, and at the same time provide solutions for the realization of sustainable development goals, promote the integration of blockchain technology and ESG, and accelerate the transition to net zero.

The event is hosted by Taiwan Future Vision Digital Sustainability Alliance and Taiwan Blockchain Alliance, co-organized by Join It Sustainable Tech. Co. and None Capital Pioneering Capital Co., Ltd.

Vice President Cheng, Wen-can of the Executive Yuan was invited to give guidance to the event; the general convener of the Taiwan Blockchain Alliance and the chairman of the Taiwan Local Creation Foundation, Chen, Mei-ling, also shared industry experience at the forum.

In addition, Dr. Chen Xiao-chang, executive director of Taiwan's New East Industry-University-Research Alliance Association, and Chen Peng-yu, co-founder of None Capital, were invited to give lectures and analysis on the key reports on the sustainable development and response of enterprises and the ecological map of Taiwan's blockchain industry.

The topic of the forum is "**How Sustainable Enterprises Practice Net Zero and Green Electricity**", chaired by Chairman Xue Weili of Join It Sustainable Tech. Professor Weng, Guo-liang, director, Huang, Zheng-cong, chairman of Taiwan Tourism Industry Alliance Association, Chan, Ru-hui, CEO of Futon-gyuan Co., Ltd., and Liu Min-ling, founder of Lvdian Technology Co., Ltd., which discussed and shared carbon reduction experience.

"**DESG Blockchain Technology Landing Application**" is the two major themes of the forum, hosted by Chen Yixue, founder of Ceres Capital, Li Yuxian, founder and CEO of Govern Climate Ltd, Zheng Qiyuan, founder of RE:DREAMER, BiiLabs Co,. Ltd. CEO Zhu Yizhen, Jcard Zheng Junzhong Business Manager, Maicoin CEO Liu Shiwei and other blockchain-related industry professionals discussed and shared.

Chairman of Join It Sustainable Tech. Co. Xue, Wei-li shared "**How to start digital transformation and net-zero applications from life**", and shared **the use of blockchain DID technology to innovate and develop a new type of wallet**, which solved the common problems of electronic wallets.

In addition, JOIN IT has also developed a number of sustainable products, including new wallets that replace traditional wallets and banknotes, NFT badge gift applications, and patented vertical solar panels applied to highway sound insulation walls. These technologies and solutions are promoting **the development of sustainability**.

The theme of the forum is the application of blockchain and the practice of ESG net-zero green electricity. It will bring Taiwan an unprecedented opportunity for industrial development. Through a series of specific cooperation and performance, such as the UN-certified net-zero farm of the Light of the World and the key report on the blockchain industry going international, the innovative cooperation model will further demonstrate Taiwan's leading position in the blockchain industry. The leading position in chain and sustainable development, and set an example for the international community.