

2026 Net Zero Tech International Contest

Sustainability Division Excellence

Project ID	Project Title	Position	Name	Representative Country / Region	School	Department
S001	Turning Waste into Climate Solutions: Biochar-PCM Composites for Carbon and Thermal Storage in Buildings	Advisor	Chen Ying-Liang	Taiwan	National Cheng Kung University	Department of Resources Engineering
		Leader	Huang Yao Kuan			
		Member	Duverger Joel Hergust	Haiti		Program on Energy Engineering
			Bakhtiyorova Gulnigor	Uzbekistan		
			Van Damme Eva	Belgian		Civil Engineering
			De la Huerta Ramirez Maria Belen	Paraguayan		Environmental Engineering
S004	Waste to Wealth: From Li-ion Batteries to High-Entropy Electrocatalysts via Machine Learning	Advisor	Hung Wei-Hsuan	Taiwan	National Central University	Graduate Institute of Materials Science and Engineering
			Lin Wei-Chun		National Sun Yat-sen University	Department of Photonics
		Leader	Tsai Yi-Lin		National Central University	Department of Chemical and Materials Engineering
		Member	Chiu I-Chia			Graduate Institute of Materials Science and Engineering
			Chang Yuan-Han			
			Huang Ching-Yun			
			Su Shi-Yao			Graduate College of Sustainability and Green Energy

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			Wang Yan-Jun		National Sun Yat-sen University	Department of Photonics
			Kuo Chia-Chien			
S006	CoNex: A Regeneratibe Net Positive Education Center with Photocatalytic and Alkai-Activated Material Façade, Carbon Sequestering Rainscreen, and Sustainable Mechanical System	Advisor	Alkadri Miktha Farid	Indonesia	Universitas Indonesia	Architecture
			Lubis Arnas			Mechanical Engineering
			Pakpahan Vine Novia			Departement of Architecture
			Amani Syahlaisa Afra			
		Leader	Athallah Nadhif Khairu			Mechanical Engineering
		Member	Sulistiyanto Fawzaan Dwi			
			Firdaus Muhammad Djackwan			
			Mellisa Laura			Architecture
S008	GreenBit: AI-Smart Heat Pump–Integrated Adsorption Direct Air Capture System for Carbon-Negative Data Center Operation	Advisor	Shang Jin	Australia	City university of Hong Kong	School of Energy and Environment
			Qinfen Gu		Australian Nuclear Science and Technology Organisation	Australian synchrotron
			Yu Bor Yih	Taiwan	National Taiwan University	Department of Chemical Engineering
			Ning Zhi	Hong Kong	The Hong Kong University of Science and Technology	Division of Environment and Sustainability

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		Leader	Zhang Boyu	China	City University of Hong Kong	SEE
		Member	Liu Jingwen		The Hong Kong University of Science and Technology	Division of Environment and Sustainability
				Chih-Lin Lee	Taiwan	National Taiwan University
S009	CocoCaptureAI:AI-Enabled Development of Scalable Next-Generation Direct Air Capture Sorbents: Transforming Agricultural Waste into Climate Solutions	Advisor	Loy Adrian	Malaysia	University of Melbourne, Australia	Chemical Engineering
			How Bing Shen		Swinburne University of Technology, Malaysia	Chemical Engineering Department
		Leader	Chen Miao	China	University of Melbourne, Australia	Department of Chemical Engineering.
		Member	Tan Adeline Shu Ting	Malaysia	Swinburne University of Technology, Malaysia	Research Centre for Sustainable Technologies
			Chew Yick Eu			Faculty of Engineering, Computing and Science
S011	Bye bye CO ₂ ...Welcome Clean Energy!	Advisor	Wang Fu Ming	Taiwan	National Taiwan University of Science and Technology	Graduate Institute of Applied Science and Technology
			Rio Akbar Yuwono	Indonesia		
		Leader	Jayaraman Divyavalli	India		
			Arumugam Suryaprakash	India		
		Member	Elaine Michelle	Indonesia		
			Qonita Ulya			
			Zhang Yi-Xuan	Taiwan		

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S013	Waste-to-energy Constructed Wetland Microbial Fuel Cell for Sustainable Wastewater Treatment	Advisor	Chong Woon Chan	Malaysia	Universiti Tunku Abdul Rahman	Department of Chemical Engineering
			Tee Shiau Foon			
			Shuit Siew Hoong			
		Leader	Siew Quee Nie			
		Member	Koh Yung Xin			
			Tai Xin Yi			
S014	Integrated Recovery of Green Ammonia and Value-Added Sulfur Products from Nitrate- and Sulfide-Containing Wastewater via Coupled $\text{NO}_3^-/\text{RRISOR}$	Advisor	Ting Jyh-Ming	Taiwan	National Cheng Kung University	Department of Materials Science and Engineering
		Leader	Hung Ting Chun			
		Member	Liao Yi Chu			
			Wu Jian an			
S016	Dual-Waste Upcycling of Solar Silicon Kerf and Biomass Wood Tar into Circular Si/C Battery Anodes: From Green-Energy Residues to Sustainable Battery Materials.	Advisor	Lin Tzu-Ying	Taiwan	National Tsing Hua University	Department of Materials Science and Engineering
		Leader	Tsai Tsung-Yen			
		Member	Chen Yu-Zhen			
			Chen Jie-Ming			
			Liao Chen-Hsin			

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S017	ACAI — Adaptive Control Algorithm Integration: Toward sustainable, energy-efficient, and membrane-safe reverse osmosis in full-scale water treatment	Advisor	Sean Wu-Yang	Taiwan	National Chung Hsing University	Department of Bio-industrial Mechatronics Engineering
		Leader	Nurjanah Isnaeni	Indonesia		
		Member	Jamaludin Mukhammad			
			Rohman Yulian Fatkur			
			Firdaus Akhmad Azhar			
			Sobhita Rama Arya			
		Wu Chia-Hao	Taiwan			
S018	VerdeMend	Advisor	Su Fengjie	Taiwan	National Kaohsiung University of Science and Technology	Department of Marine Biotechnology
		Leader	Tsai Minluen			
		Member	Hsu Lisi			
			Tseng Ningshao			
			Huang Chiungwei			
			Chen Pinron			
			Xu Minglun			

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S019	Energy-Efficient and Low-Cost Carbon Capture Using Hydrophobic Membranes	Advisor	Matsuda Yuki	Japan	Tohoku University	Graduate School of Environmental Studies
		Leader	Yoshida Kota			
		Member	Nobuhide Yasuda			School of engineering
			Tani Ryunosuke			
			Yamamoto Risa			
S020	The Power of Biochar: Applications in Agri-Biodegradable Mulch Films and Heavy Metals Sorption	Advisor	Iamsaard Kesinee	Thailand	Naresuan University	Natural Resource and Environment
			Lin Yao-Tung	Taiwan	National Chung Hsing University	Department of Civil Engineering
			Hsueh Han-Yu			Department of Materials Science
			Jenn-Wen Huan			Department of Department of Plant pathology
			Weng Chih-Huang		I-Shou University	Department of Civil Engineering
		Leader	Prethawin Kanyasorn	Thailand	Naresuan University	Natural Resource and Environment
		Member	Phatcharapha Yoisakun			
			Supitcha Panapoy			