“建行杯”第十六届全国大学生节能减排社会实践与科技竞赛港澳台及国际赛道推荐优秀奖作品名单

经专家评审和会议表决通过，共有40件作品被推荐为第十六届全国大学生节能减排社会实践与科技竞赛-港澳台及国际赛道优秀奖。

具体名单如下（排名不分先后）：

公示时间：7月20日-7月24日

全国大学生节能减排社会实践与科技竞赛委员会秘书处

东南大学能源与环境学院

2023年7月20日

List of works recommended for the excellence award of "CCB Cup" the 16th National University Student Social Practice and Science Contest on Energy Saving and Emission Reduction (Hong Kong, Macao, Taiwan and International Group)

After expert evaluation and voting at the meeting, a total of 40 works were recommended for the excellence award of the 16th National University Student Social Practice and Science Contest on Energy Saving

and Emission Reduction (Hong Kong, Macao, Taiwan and International Group)

The specific list is as follows (regardless of order):

Name of university	Title
University of Wisconsin-Madison	Mobile power router electric vehicle charging station
Monash University	Dynamic Energy Efficiency Optimization of Photovoltaic/Thermal Integrated Heat Pump Systems
City University of Hong Kong	Rechargeable Zinc-ion Battery Based on Water System
Monash University	A dazzling and energy-saving full heat recovery fresh air window
The University of New South Wales	Photosynthetic microbial fuel cell system based on bionic giant clam
University of Southampton UK	Design manual for electronically controlled fuel system for open type diesel engines
The University of New South Wales, Australia/The University of Sydney	FertilizerLEAP – Green Ammonia Production Platform
Belarusian State University of Physical Education	Speed bump for green travel-Self-powered carbon cleaning device based on efficient potential energy recovery
Arizona State University	Research on Green Campus Construction under the "Dual Carbon" Goal: Based on a survey of 7 universities in China and Southeast Asia
University of Bologna	A trip to explore potential – a survey of carbon reduction potential for students
Newcastle University	Green Intelligent Manufacturing - Five-axis CNC monitoring and evaluation system based on digital twin
The University of Hong Kong	"Three birds with one stone"—a portable battery based on nitrate reduction
Dublin University of Technology, Ireland	Nanometer magnetron sputtering photocatalytic new car film
University of Calgary	Design of light guide based on GPRS control system to replace tunnel bulb
The university of Debrecen	"Solar Sandwalker" —— Design manual of desert sand control robot based on solar air water intelligent irrigation
Inner Mongolia University of Science and Technology	New Energy Smart Street Lamp Design Declaration Based on Internet of Things
Georg-August-University Goettingen	Tree based passive multi-coupling condensing water

	extraction device
University of Macau	“Tiny current ably concerned”—— design specification of self-powered smart insole for health monitoring
University of Macau	Gold Diggers: Microfluidics-Based Microbial Recovery of Precious Metals
City University of Macau	A new type of marine garbage recycling and transformation platform
University of Macau	Intelligent Cooling Cushion Based on Semiconductor Refrigeration and Micro-channel Circulation
University college London	Red transport without "line" —— A new remote wireless charging technology based on infrared ray
Northern Arizona University	Cyanophyta Bloom to Carbon Material- Instruction Manual for a Ship-integrated Hydrothermal Carbonization System to Simultaneously Produce Carbon Quantum Dots and Carbon Dioxide Adsorbents
Northumbria University	A scroll hydrogen engine coupled with organic hydrogen storage system using multi-stage waste heat recovery
The University of Manchester	Fresh and cold chain first—Intelligent Guardian of Fresh Scattered Delivery
University of Illinois Chicago	One road generation "electricity" - intelligent lifting speed belt power generation device for deep utilization of road residual energy
Arts et Métiers ParisTech	Offshore integrated energy generation system
The University of Manchester	Born towards the sun — a smart street lamp system based on cloud-edge collaboration
Yonsei University	A new design of blowdown water recycling in circulating cooling water system based on energy saving and emission reduction
Bangor University	The Instruction Manual for Vehicle-Mounted Methanol Steam Reforming technology for Hydrogen Production Based on Waste Heat Recovery
Heriot-Watt University	Carbon chain- Blockchain facilitates carbon-neutral solutions
University of Birmingham	Hydrogen New Power - /N, S-rGO Bifunctional Total Water Dissolution Catalyst Development and Promotion Design Manual
Humboldt University of Berlin	A Miniature Robot for Pest Detection and Control Utilizing a Gel-based Piezoelectric Luminescent Actuation System
University of Kentucky	Pre-treating high-magnesia limestone in electrolytic cells enables carbon emission reduction in cement production and green hydrogen preparation
Minsk State Linguistic University	“Renewing from Waste” - A Carbon Fiber Composite Waste Reutilization Process Based on Supercritical Fluid Degradation Technology

University of Liverpool, Xi 'an Jiaotong-Liverpool University	EcoGuardian: Your Portable Sterilizer and Freshener with PAW & DBD Technology
University Of Sussex	Intelligent cruise-solar water environment monitoring clean linkage equipment
Technological University Dublin	Infinite power team – Thermosensitive starch intelligent window design specification
Technological University Dublin	The innovator-Novel Green Thermal Insulation Material
University of Freiburg	Multiple Batch Metal Ion Enrichment Devices and Their Applications

Publicity time: July 20th to July 24th

Secretariat of the National College Student Energy Conservation and Emission Reduction Social Practice and Science Contest Committee

School of Energy and Environment, Southeast University

July 20, 2023