

Annex

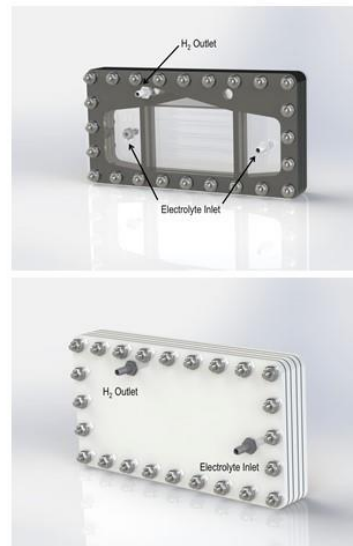
**The first batch of approved applications
in the first round of Green Tech Fund applications**

Application number	Project title	Applicant	Approved duration	Grant approved
<u>Promotion of new energy and RE projects</u>				
GTF202020131	Green Hydrogen Production from Active Flow Membraneless Electrolyzers	The Hong Kong University of Science and Technology	36 months	\$3,198,150
GTF202020204	Turning Water into the Source of Solar Hydrogen via Photocatalyst Panel	City University of Hong Kong	36 months	\$2,876,449
GTF202020164	Development of Printable Perovskite Solar Cells for Transformative Clean Energy and Sustainable Society	City University of Hong Kong	36 months	\$5,031,934
<u>Promotion of circular economy and turning waste into resources projects</u>				
GTF202020051	Recycling of waste lithium-ion batteries as highly active fuel cell catalysts	The Hong Kong Polytechnic University	24 months	\$2,783,920
GTF202020153	Biochar-enhanced Construction Materials for Sustainable Waste Management and Decarbonisation	The Hong Kong Polytechnic University	36 months	\$8,784,200
<u>Low-carbon waste management technologies projects</u>				
GTF202020095	Reducing Biological Landfill Leachate Treatment Footprint via Rapid Electrochemical-UV Technologies	The Hong Kong University of Science and Technology	30 months	\$6,674,600
GTF202020144	Coupling AnMBR and PNA for Compact - and Energy-Saving Landfill Leachate Treatment	The University of Hong Kong	24 months	\$4,381,040
<u>Smart air quality monitoring projects</u>				
GTF202020250	Temperature and Humidity Impact Free Gas Sensor and Monitor System Development for Real-time High Performance Air Quality Monitoring	Sundial Technology Development Limited	36 months	\$5,701,200

Green Hydrogen Production from Active Flow Membraneless Electrolyzers (Application Number GTF202020131)



Test rig for assessing the performance of a prototype active flow membraneless electrolyzer (AFME).
研究人員正在測試使用液流無膜電解系統。



3D render of a proposed active flow membraneless electrolyzer (AFME) prototype.
項目其中一個液流無膜電解系統的3D設計示意圖。

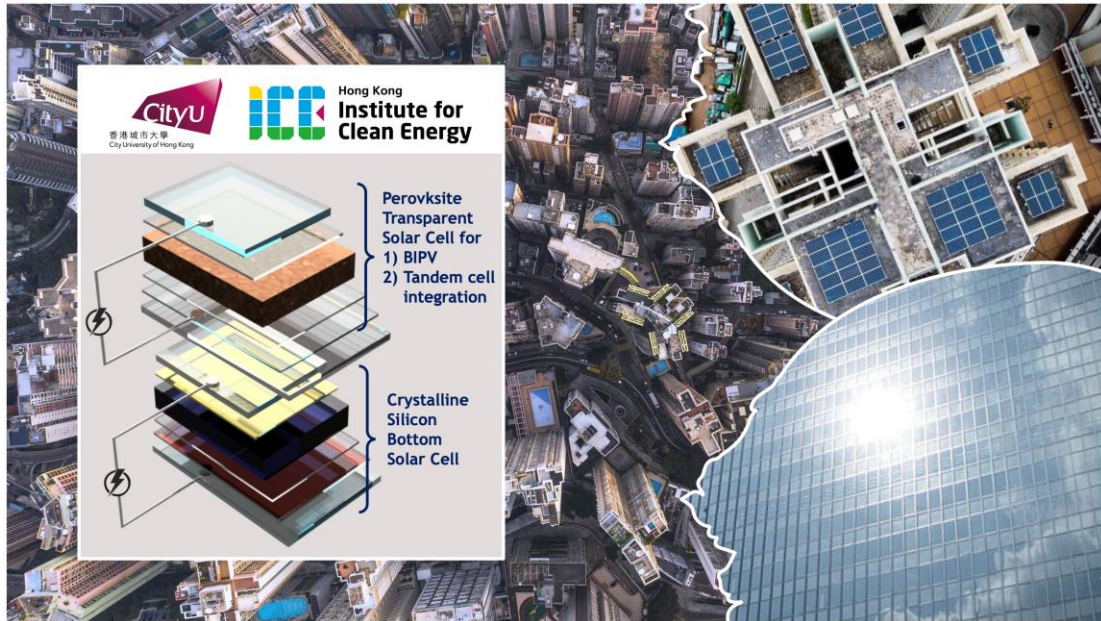
Turning Water into the Source of Solar Hydrogen via Photocatalyst Panel (Application number GTF202020204)



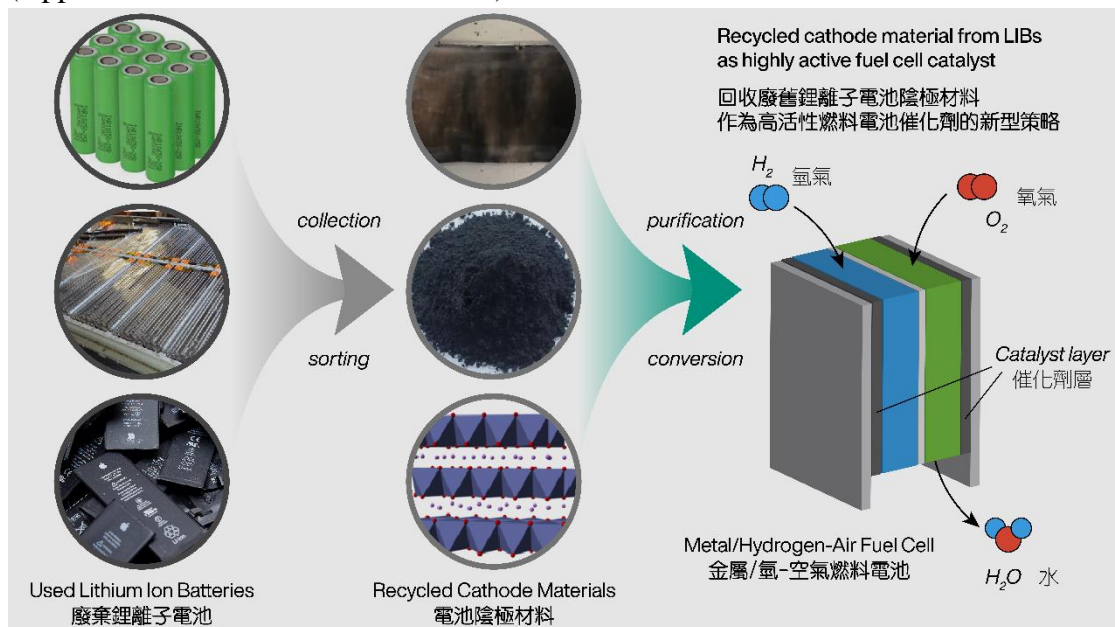
香港城市大學
City University of Hong Kong

Photocatalyst powder coated on transparent glass substrate can be used for producing hydrogen from water under sunlight
塗在玻璃基板上的光催化粉末,可用於在陽光下從水中製氫

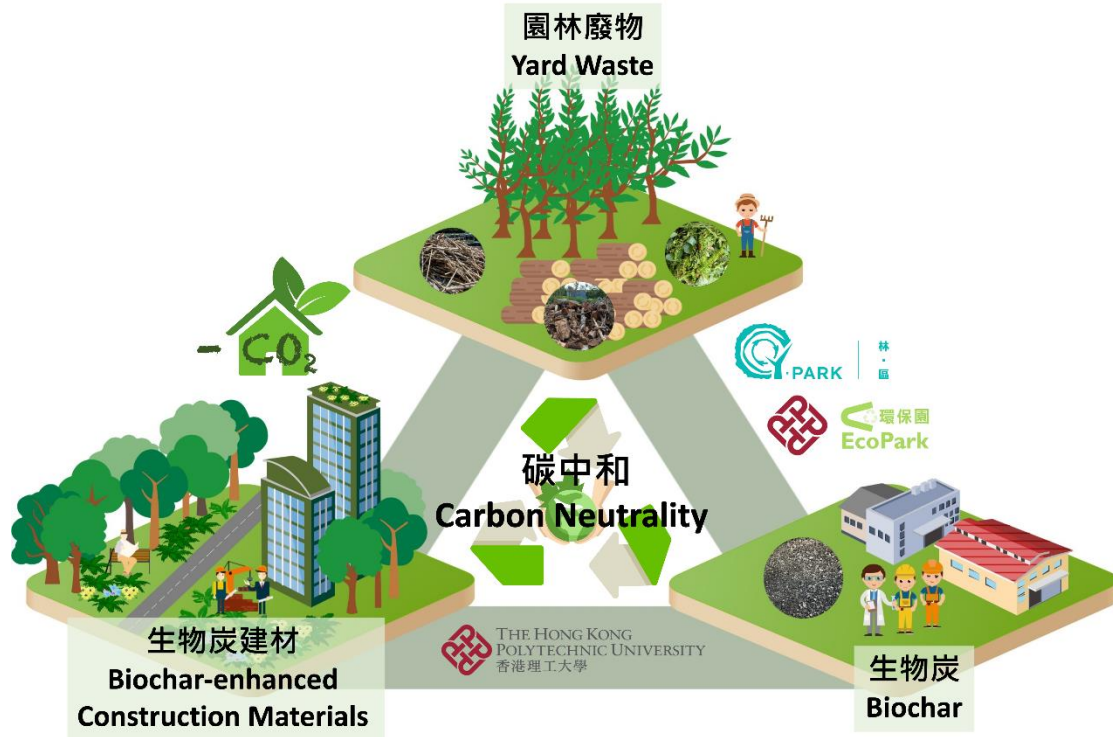
Development of Printable Perovskite Solar Cells for Transformative Clean Energy and Sustainable Society (Application Number GTF202020164)



Recycling of waste lithium-ion batteries as highly active fuel cell catalysts (Application Number GTF202020051)



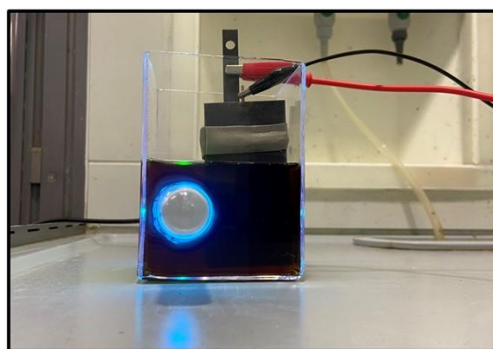
Biochar-enhanced Construction Materials for Sustainable Waste Management and Decarbonisation (Application Number GTF202020153)



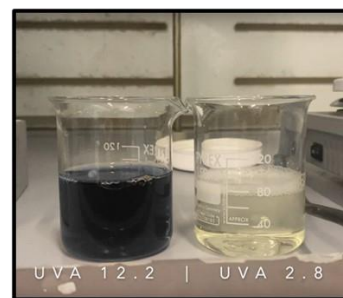
Reducing Biological Landfill Leachate Treatment Footprint via Rapid Electrochemical-UV Technologies (Application Number GTF202020095)

A rapid application of electricity and ultraviolet radiation for the treatment of landfill leachate.

利用電和紫外線快速處理垃圾填埋場滲濾液

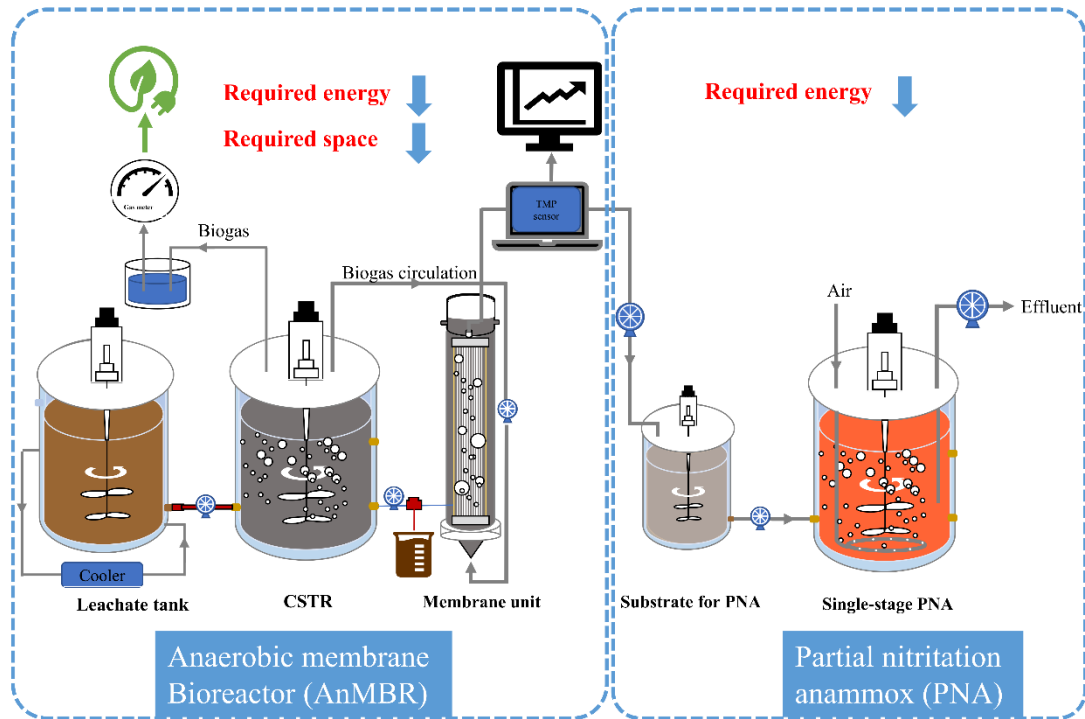


ECO® Reactor
ECO® 反應器

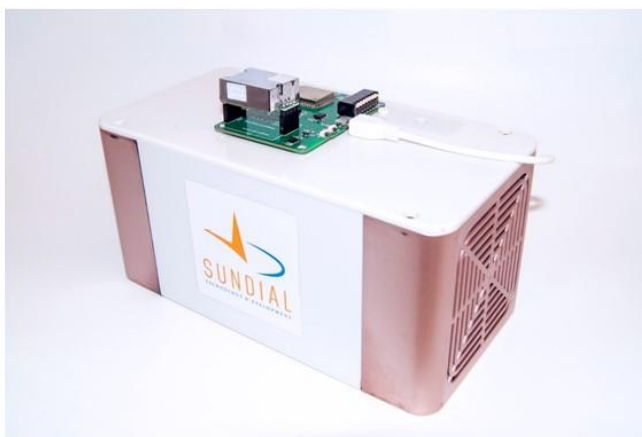


Before applying ECO® | After applying ECO®
使用ECO®之前 | 使用ECO®之後

Coupling AnMBR and PNA for Compact - and Energy-Saving Landfill Leachate Treatment (Application Number GTF202020144)



Temperature and Humidity Impact Free Gas Sensor and Monitor System Development for Real-time High Performance Air Quality Monitoring (Application Number GTF202020250)



Prototype Air Monitor
空氣監測系統原型

Normal		
PM10 11 µg/m ³	PM2.5 11 µg/m ³	PM1 10 µg/m ³
NO2 6 ppb	O3 5 ppb	CO 0.98 ppm
Temperatur 27.2 °C	Humidity 49 %	CO2 424 ppm

Data Display
數據顯示