

Organisations Category

Contractor in New Works

Gold Award

AJA Joint Venture



O-PARK2 (Contract No.: EP/SP/86/15)

Based on a continuously updated sustainable environmental management policy and tight safety management, O-PARK2 comprehensively implements sustainable construction measures with efficient management supported by digitalisation technologies. The major measures include sustainable BIM application, green supply chain development for low-carbon materials application, site electrification, etc. With these measures, O-PARK2 has obtained BEAM Plus NB V1.2 Provisional Platinum, achieved 4,240 tonnes CO₂-e of carbon reduction, and realised milestone Carbon Neutrality for construction period through carbon credit offset in June 2022.

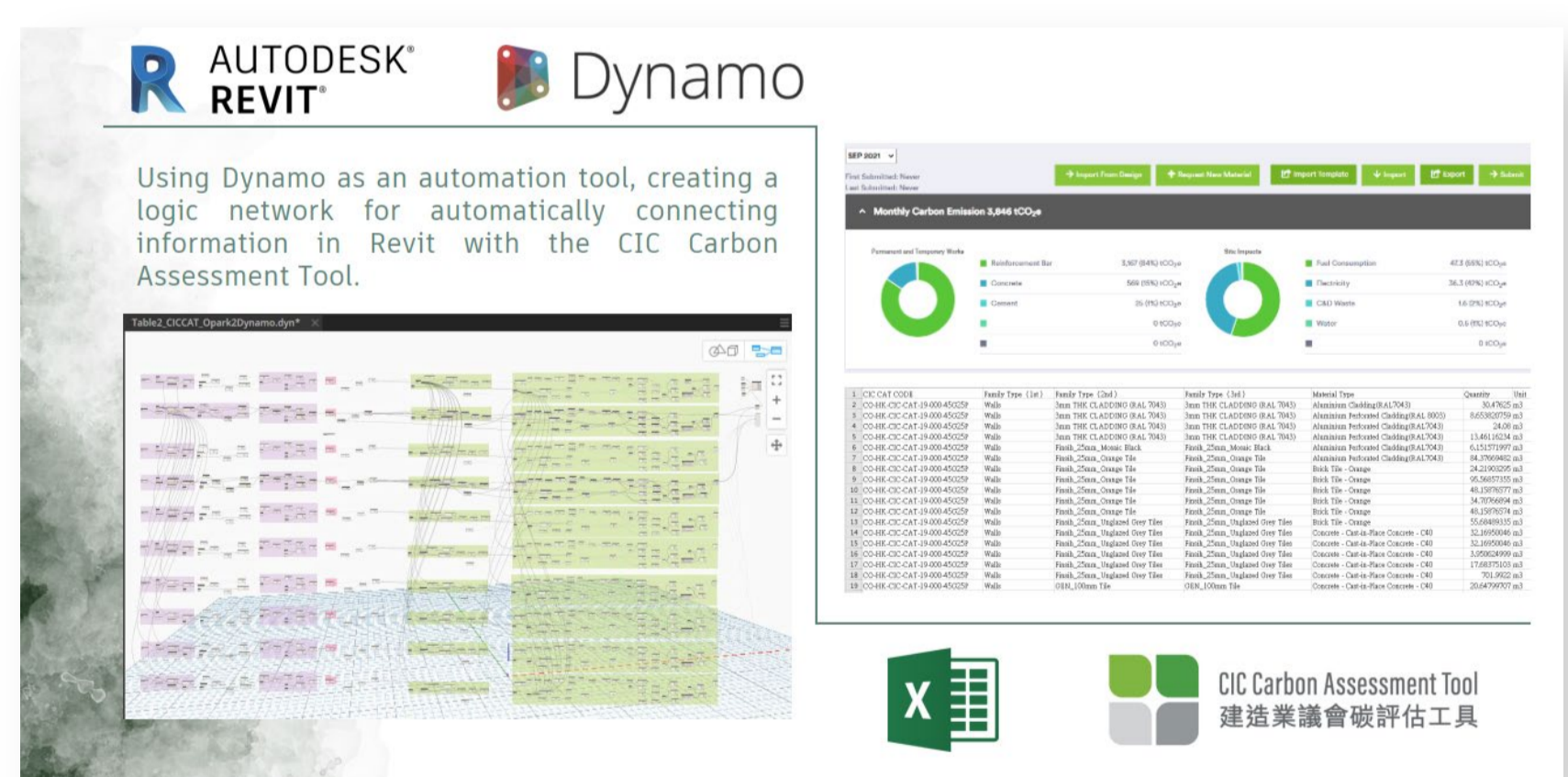


Sustainable Best Practice 1

O-PARK2 is the first engineering project to introduce Carbon Capture, Utilisation, and Storage (CCUS) technology, and adopted CCUS-based carbon dioxide mineralisation curing concrete bricks in the block wall located in the Administration Building. The application of CCUS bricks can reduce 61 kg of carbon dioxide emission per cubic meter, equivalent to the carbon dioxide removed by a tree for 3 years.

Sustainable Best Practice 2

O-PARK2 is the first pilot trial using Dynamo to extract necessary data from BIM as the input information to the CIC Carbon Assessment Tool for carbon emission prediction.



Sustainable Best Practice 3

O-PARK2 team developed a Carbon Neutral Cloud Platform for real-time quantification of greenhouse gas emissions. According to ISO 14064-1(2018), the platform integrates innovative technologies such as blockchain, artificial intelligence, and the Internet of Things to enhance efficiency and ensure the accuracy, authenticity, and traceability of data.