

Environmental Research, Technology Demonstration and Conference Project

ECF Project:	ECF 2021-12
Project Title:	Does the “Right Tree, Right Place” principle increase carbon sequestration of urban trees?
Principal Investigator:	Dr Lee Shing Him (replaced by Dr. Allen Zhang w.e.f. 9 February 2023, further replaced by Dr Lee Shing Him w.e.f. 23 October 2023), Department of Environment, Technological and Higher Education Institute of Hong Kong, Vocational Training Council
Total Approved Grant:	\$380,444
Duration:	1/9/2022 to 31/8/2024
Project Status/Remarks:	On-going
Project Scope:	<p>Climate change affects Hong Kong. A purpose of planting trees is to sequester carbon. Urban trees, if planted in wrong places, are often removed due to poor performance. Carbon is released back to the atmosphere as wood of removed trees decomposes, nullifying carbon sequestration. If the loss of sequestered carbon in removed trees are unaccounted for, effectiveness of greening-related climate actions will be over-estimated. Currently, the carbon sequestration ability of urban trees is still unknown.</p> <p>The aim of this project is to examine the effect of arboricultural practices on the carbon sequestration ability of urban trees. This two-year project will study 14 common urban tree species. After field data collection assisted by the arboriculture industry, methods of estimating carbon sequestration will be generated using dendrometric and habitat parameters. Quantitative data on carbon sequestration ability of the studied species will be provided. The effect of arboricultural practices, namely planting right trees in right places, on carbon sequestration of urban trees will be examined.</p> <p>This project can motivate the horticulture and arboriculture sector to accumulate greater climate resilience via a transformation in their practices. The impact of the project will be actualised with scientific publications, policy recommendations, education campaigns and promotion materials.</p>
Summary of the Findings/Outcomes:	To be available upon completion of the project