



## PROJECT SUMMARY

<b>Ref No.:</b> MRIC-PCS-24-BG-P02	<b>Title:</b> Repurposing of shipping containers as a sustainable building system in response to climate resilience
<b>Local Company:</b> Associated Container Services Ltd	
<b>Collaborating Company:</b> Rogers and Company Limited	
<b>Project Leader</b>	
Mr Gregory de Comarmond	Associated Container Services Ltd
<b>Research Collaborator</b>	
<b>Name</b>	<b>Organisation</b>
Mr Bandish Augnoo	Rogers and Company Limited
<b>TECHNICAL ABSTRACT</b>	
<p>With the surging container transportation throughout the globe, its end of life is creating both environmental and social concerns. At Velogic, which is a leading logistics and transport company in Mauritius, around 1600-1800 used shipping-containers are at the depot, and less than 50% of these used-containers have been converted into homes or offices. Owing to limited space to store these containers and expensive cost to send to its origin, it is imperative to tackle this used-container issue. Amongst all the reuses, repurposing shipping-containers into green building homes provides an innovative approach to circular design concept. Therefore, the main concept behind this project proposal is to investigate the life cycle of repurposing the shipping-containers into sustainable homes in response to climate change resilience in Mauritius. The environmental impacts and carbon footprint of the current practice at Associated Container Services Ltd will be compared with an improved container house taking into consideration all sustainability aspects. The potential of local biomass material insulation will be explored, followed by green-roof technology and energy-material-water nexus. This will also provide eco-conscious living, which is a beacon of social hopes for the planet to thrive in harmony with the environment.</p>	
<b>Key Words:</b> Circular Economy, Carbon footprint, Shipping-containers, Sustainable development	