

# SUSTAINABLE STRUCTURAL DEMOLITION AND REPURPOSING: UTILIZING NET CARBON ZERO ENGINEERED SOLUTIONS TO COMBAT CLIMATE CHANGE

**PROBLEM:** As the world combats environmental changes that are diametrically impacting the coastlines of the world through rising sea levels, coastal populations find themselves in need of solutions that are too expensive or too destructive to the existing ecosystem and, therefore, unsound.

**SOLUTION:** In order to avoid contributing to the original problem of climate change, material that has already been manufactured is being used to solve this problem. As the solutions involve heavy civil engineering manipulation of the infrastructure, it makes sense to use materials that result from decommissioned heavy civil engineering infrastructure. This solution avoids the creation of a larger environmental footprint from manufacturing new materials, but also reduces the cost of implementing coastal resilience projects to allow responsible agencies and governmental departments to get the maximum solution for the minimal cost.

**YIELD POTENTIAL:** Disposal of material is a large proportion of a demolition project budget. Generators of this waste are very satisfied to give it away where possible. Therefore, if you can create a marketplace that can facilitate the application of the material to the environmental solution, with the only cost to collect, and deliver it to the end user, then the returns could be very high to both the end user and the producer of the yield. The key is to be able to match the supply with the demand before the material is decommissioned so there is no additional handling and storage cost.



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**FRIDAY, NOVEMBER 5, 2021**  
**2:30-3:30 PM Discussion to follow**

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