Re-Leaf

Executive Summary prepared for the Biomimicry Institute, 12/7/2021

Re-Leaf is a modular emergency raft. It serves as an emergency rescue boat/raft during extreme floods and as a bench, roof, or divider all-year round when it is not flooding.

PROBLEM & OPPORTUNITY
Tropical and dense countries like the Philippines experience rain half of the year and people fall to victim to floods and typhoons. 12,097 deaths from natural extreme events and disasters were recorded in the Philippines from 2010-2019 with a huge percentage of those being attributed to typhoons (Philippine Statistics Authority 2020). People from local government units and other organizations conduct rescue operations but the stranded victims are hard to reach while bringing the rescue boats.

SOLUTION
We help rescue volunteers rescue stranded flood victims faster and more efficiently by placing emergency rafts closer to the victims. We aim to make the process of reaching flood victims easier.

BIOMIMICRY IN PRACTICE
The main concept behind the product is the modularity and adaptability of the raft. The inspiration was the phasmids’ ability to transform during times of need. For the raft, the inspiration came from the Victoria water lily’s ability to float and support weight heavier than it.

REVENUE MODEL
Directly selling to the local government units and disaster risk reduction organizations +licensing deals with boat manufacturers.

TRACTION
We are currently in the prototyping stage. In terms of support, the Industrial Design Department of the College of Saint Benilde is helping connect us with people and organizations who can help make this concept a reality.

TEAM
We are a team of industrial design and architecture students who are passionate about creating solutions to real world problems. We were mentored by designer Eric Mendoza during the competition stage and by Rune Percy during the 2021 Biomimicry Launchpad program.

NEXT STEPS
Future plans include continuing to prototype in partnership with the target users and organizations and looking for potential partners in the technology space to help improve the design.