The global environmental problem of decommissioned wind turbine blades (WTBs) and solar panels (SPs) has created a pressing need for innovative solutions. Researchers and industry professionals are actively exploring various recycling techniques, such as chemical and mechanical recycling, and alternative uses such as creating new building materials or installations. Current recycling technologies do not yet offer industrial solutions. Despite the large amount of waste predicted, an effective scenario for waste management could not be found. A research project is being carried out within the Resource-Based Design Research Lab (RBDR/Lab) at Texas A&M, to address this issue, design solutions based on specific selection criteria have been developed. These criteria include minimizing waste, ensuring universality, addressing a local problem in Texas, increasing value, ensuring financial feasibility, promoting industrial symbiosis, meeting, or exceeding market standards, and minimizing transportation costs. This presentation will showcase the solutions proposed by Mechanical Engineering students from Texas A&M during their Capstone Project.