

# Mechanical Scrap Architecture “A new way of Solid Waste Management”

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This research was initiated in Pakistan with the background studies to provide ample solution for Scrap metal recycling generated by Automotive industry and other sources in the country that includes users, dealers, workshop owners or service providers, theft and terrorist related activities.

This research was regenerated with statistical data collected from different resources in United States and we are trying to modify our results and solutions based in USA. According to the survey in 2012 around 5 million cars were produced in USA and for imported vehicles the largest number of vehicles was imported from Japan that is approximately, 2.5 million. After conducting surveys through recycling agencies and junkyards we found that around 40-60% of reported cars were reused and rest were sent to the recycling plant. As Per U.S. Environmental Protection Agency (EPA) about 6 percent of the world's waste are vehicles, where using conventional method for recycling an automobile constitutes 50-60% of automobile shredding where the remaining percentage is considered as residue and is sent for land fill. over 3 million tons of SR generated in the U.S. each year are managed by landfilling. Material recovery or energy recovery alternatives to landfilling can be beneficial because of conservation of non-renewable resources and reduction of waste disposal.

This research provides a viable solution that addresses the automotive waste management issues from the industry through the end user. The strategy is to provide a vital design based solution or an alternate that serve multipurpose, we developed an adjustable structure using different car components that can be used as shelters, street kiosks for vendors, monuments and exhibits. Following is the example of exhibits where the structure can serve as an exhibit to create public interest in solid waste management for Automotive industry. Innovation Park at the Ford invites visitors to explore how Ford researches are making advances in the use of organic materials, reducing waste and other environmentally sensitive technologies. The display includes water and plant elements that showcase Ford efforts to reduce carbon dioxide emissions and water usage.

**Keywords:** Automobile Scrap, Recycling, Waste Management