BIG GREEN ENVIRONMENTAL SOLUTIONS

Autonomous Trash Receptacle

The Problem: Every day thousands of people toil away to bring their garbage, recycling, or organics bins to the curb for pickup. Not only is there the aspect of physical difficulty, but remembering which bin to bring out can add unwanted stress to our lives. In a world where the benefits of technology are improving our lives in numerous ways, this modern inconvenience has sadly been ignored. Some people have previously tried remote control solutions to this problem, however they still require human time to manually drive to the curb. Luckily our new invention will relegate these hassles to the past.

The Solution: Utilizing the latest and most advanced technologies at our disposal, we at *Big Green Environmental Solutions* have developed a novel way of taking out garbage bins. We have in essence, reinvented the wheel. No more shall the average person be required to manually place their garbage bins on the curbs. Rather this will be done automatically through our *Autonomous Trash Receptacle.* Our trash receptacle can automatically drive itself to the curb and return itself safely to its starting location.

How it works: Our custom-built software and hardware work in tandem to provide you with the experience you desire. Using GPS, sonar, and vision technologies we can pinpoint the bin's exact location which allows us to determine the garbage pickup schedule and the optimal route to the curb. In addition to all of this, the *Autonomous Trash Receptacle* also uses clean, renewable solar energy to charge its battery free of cost to you.

Maintenance: The trash receptacle automatically receives the latest firmware updates through its internet connection without any required user interaction.

Current Progress: The bin is currently able to move on its own power following programmed inputs received wirelessly. The bin is capable of carrying a reasonable amount of weight and has a long battery life using an 8000mah LIPO battery. Anti-tipping wheels have been added as the bin is slightly back heavy without a load.