# Save The Planet: Recycle Your Smartphone

Do you have multiple old phones, that are just lying around and gathering nothing but dust? I have the solution for you, even when it’s old and broken, it is still worth something.

There are a lot of people who refurbish phones by repairing and creating a spotless new phone from it. Small recycling businesses are setting a trend of recycling parts of cell phones, by extracting gold from the motherboard and motherboard components. By doing this, they are not only helping the environment but also those people who cannot afford to buy a brand-new phone.

From there on, they will remove all the metallic components and break open the chips that contain the CPU and GPU, where a lot of gold can be located. Note that not all cell phones contain the same amount of gold inside the phone or the phone components. On the ribbon contractors, chips, and motherboard small amounts of gold can also be located. Due to gold being a better conductor of electricity than copper and other elements, you will find 1.5 microns to 2.5 microns of thin layered gold. To remove it, they will break most of the components into little pieces and pour nitric acid and leave it inside the container for 2 to 3 weeks. To fasten the process, they use more advanced systems and install a small 12 V air pump with a pipe under the components, to agitate the water and bring H20 into the system.

The acid nitrate then eats away the nickel and a few other metals, that are located between the gold and the motherboard, separating the thin layer of gold. There will be other metals as well, but only a small amount. They then take a plastic strainer to separate the fine gold flakes from the motherboard and its components, using a spray bottle to spray off the flakes that are sticking to the components.

The last step is using a fine coffee filter and pouring nitric acid emulsion with the fine gold flakes. Repeat this process a few times to remove all the flakes from the emulsion.

And there you have it! Who would have thought that your old phone, that was only gathering dust can contribute to saving the planet and extra cash in your pocket?