

Did you know your computer contains precious metals?

Some people might not know that there are precious metals in your electronic devices but there are some very valuable metals that can be found in your electronic scrap. Used electronic devices can be reused, recycled, resold, and salvaged.

Making sure that you recycle your electronics is very important because the number of people and companies recycling their electronics is low. There are two billion smartphone users that upgrade to a new phone roughly every 11 months and barely 10% of those phones get recycled.

By recycling your e-waste with precious metals, it allows for these precious metals to be reused, therefore reducing the need to mine and process new materials. Some of the precious metals that are in these electronic devices include:

Gold: Gold is used in printed circuit boards, cell phones, computer chips (CPU), connectors and fingers.

Silver: Silver is used in printed circuit boards, cell phones, computer chips, keyboard membranes and some capacitors.

Platinum: Platinum is used in hard drives and circuit boards components.

Palladium: Palladium is used in cell phones, hard drives, circuit board components and capacitors.

Copper: Copper is used in CPU heat sinks, wiring cables, cell phones, printed circuit boards and computer chips.

Nickel: Nickel is used in to circuit board components.

Tantalum: Tantalum is used in circuit board components and some capacitors.

Cobalt: Cobalt is included hard drives.

Aluminum: Aluminum is used in printed circuit boards, computer chips, hard drive, CPU heat sinks.

Tin: Tin is used in printed circuit boards and computer chips.

Zinc: Zinc is used in printed circuit boards.

Neodymium: Neodymium is used in hard drives.

The amount of precious metals that are found in electronic devices can be substantial. The EPA estimates for every 1 million cell phones recycled you can get these amounts of precious metals:

- 35,274 pounds of copper
- 772 pounds of silver
- 75 pounds of gold
- 33 pounds of palladium

... With regards to precious metals, circuit boards contain gold, silver, and platinum, as well as general-use metals, such as copper, aluminum, and iron. Silver and gold are mainly used in contact areas, because they are protective and conductive. These metals are found in different quantities in TV and computer units and have an average of 70% copper, 16% solder, 4% iron, 3% nickel, 2 % silver, and 0.05% gold.