

## 3D PRINTER MADE IN TOGO FROM RECYCLED E-WASTE

Located in its [WoeLab Laboratory](#) in Lomé the expert in electronic Kodjo Afate Gnikou has designed and built the first 3D printer prototype, using parts from discarded e-waste.

In particular the W.AFATE 3D printer is made up with parts of old computers, 2D printers and scanners collected from the growing e-waste dumps around Lomé. The author defined his invention as *the first ecological and democratic 3D African Printer*.

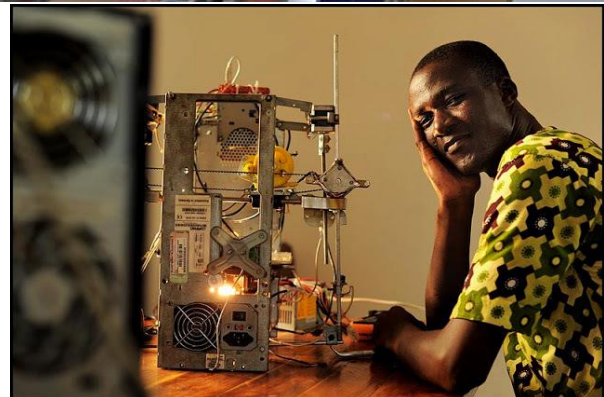
The 3D printer can help in resolving an important environmental problem. The [WoeLab](#) estimates that every year 515 tonnes of e-waste (among which are 600.000 computers) from the industrialized countries are trashed in the dumps of African territories. E-waste are then often burned in open air causing huge health and environmental problems.

The WoeLab Laboratory of Kodjo Afate Gnikou collects electronic wasted components from those dumps and provides assistance to stakeholders in Lomé interested in building new prototypes of equipment for agriculture, such as automatic irrigation systems, for other production sectors or services. The WoeLab, which defines itself as a *laboratory of the street*, is an incubator of innovative products that take advantage of local resources in a *circular economy approach*.

In particular the WoeLab wants to tackle the following important goals:

- valorise electronic waste in a perspective of circular economy, helping to clean the e-waste deposits of the territory;
- put technology within the reach of local actors, particularly young people, so that they can be actors of a more virtuous industrial development;
- enhance the reuse of discarded electronic equipment, avoiding ending in dumps and producing an economic value for final users such as schools, Internet cafes and other social services.

In 2013 the W.AFATE 3D Printer won the ambitious award of NASA space applications in Paris (France) and other international recognitions.



The success of this innovation and its great potential is demonstrated by the wide dissemination of information by the international press.

Currently ten models of 3D printers are being used in schools and Internet cafe in Lomé. Meanwhile Woelab has launched a [crowd fundin campaign](#) to actively start collecting resources to scale up the production. The perspective is put in commerce the W.AFATE 3D Printer at an affordable cost of \$ 100, favoring its social use.

### To know more

[Article in 3ders.org](#)

[Article in ulule.com](#)

[Article in medium.com](#)

[Article in wedemain.fr](#)

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