

Lima billboard is tapped for drinking water

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(Phys.org)—A billboard in Lima, Peru, created by ad agency Mayo DraftCFB in collaboration with the University of Engineering and Technology (UTEC), captures the air's humidity and turns it into potable water for Lima residents. Lima is referred to as a "desert megacity" where many residents cope with inadequate access to clean drinking water. The agency and university formed a team to produce what they refer to as the first billboard that produces drinking-water out of air.

[Generators](#) inside the [billboard](#) process the air and filter it into water, stored and drawn by residents at the bottom of the billboard. The system

has an air filter, a condenser and a carbon filter. The system is designed to generate 96 liters of water per day for the [local community](#).

A video showing the project presents more of the details. "Each generator captures the [air humidity](#)," said a team member, "and from there it goes through a reverse osmosis system; each tank stores about 20 liters." Five generators' purified water is gathered into one tank.

The collaboration is motivated by a need for many of the city's local residents for clean [drinking water](#) in an area where the presence of rain is almost zero. Lima and surrounding villages are in a "coastal desert "of Peru. The partnership of an ad agency with a university stemmed from Peru's UTEC need to come up with a solution to motivate students to apply for its engineering program. A UTEC motto is, "We will continue changing the world through engineering." The water-bearing billboard promotes the capabilities of UTEC.



While this is a local initiative, a more far-reaching response has been announced, in the form of an ambitious plan under way to address Lima's water issues, Peru's state water company plans to invest \$3.3 billion in Lima's water and [sewage](#) infrastructure in over the next three years. According to the Ministry of Housing, about 700,000 Lima residents lack access to potable water, while another 600,000 rely only on water cisterns. The investment will allow for 148 water projects, to be overseen by Sedapal, the state-owned water utility company. The company will build reservoirs, wells and water-treatment plants as well as replace 3,000 miles of water pipes in Lima.

More information: [www.utec.edu.pe/noticias-utec- ... ra-agua-potable.html](http://www.utec.edu.pe/noticias-utec-...ra-agua-potable.html)
[www.peruthisweek.com/news-3624 ... ater-infrastructure/](http://www.peruthisweek.com/news-3624...ater-infrastructure/)

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