

Scientists are gamifying the hunt for global carbon dioxide By Rejimon K

limate-science researchers from Arizona State University are now on a unique mission. They have started a hunt and have appealed to citizen scientists" to locate all the power plants around the world and quantify their carbon-dioxide emissions through a game.

Hosted on a website called "Ventus"— the Latin word for wind — the game has a simple interface that allows users to enter basic information about the world's power plants. By playing the game, people around the globe can help solve the climate-change problem.

"There are as many as 30,000 power plants around the world, burning fossil fuels. Although a list of those facilities — created by the Centre for Global Development — does exist, scientifically accurate information, which researchers need to map each power plant's location and carbon-dioxide emissions, does not," claimed Kevin Gurney, an associate professor in ASU's School of Life Sciences in the College of Liberal Arts and Sciences and a lead scientist for the project.

"Of all the fossil fuel-based carbondioxide emissions in the world, power plants account for almost half. So, it's safe to say that a major contributor to the climate-change problem is the production of electricity everywhere in the world," said Gurney, also a senior scientist with ASU's Global Institute of Sustainability.

"Although you might imagine that we already know where these facilities are and how much carbon dioxide they emit, it turns out that we don't. Considering

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> **Kevin Gurney** Associate Professor, ASU

the economic growth in countries such as China, India, and Brazil, this lack of information poses challenges to finding scientific solutions that address climate change.

"The Ventus Project will empower citizen scientists with a simple tool that could help in solving a significant climatechange problem," stated ASU President