CATTLE WEARABLE CAPTURES BURP METHANE AND CLEANS THE AIR

The smart halter helps reduce global warming and provides producers with real-time herd health data

Spotted: With the world’s population expected to exceed eight billion by 2030, the United Nations’ Food and Agriculture Organisation (FAO) predicts an increase in demand for meat and dairy foodstuffs as well. The attendant challenges include waste disposal and pollution, with the methane produced by cows of particular concern. London-based ag-tech startup ZELP (Zero Emissions Livestock Project) has a solution.

The company’s smart halter captures nearly 90 per cent of each cow’s burp methane and provides real-time data that includes insemination success, early signs of disease and location. The trapped gas is converted into carbon dioxide and water, and the halter works in the same way as does a regular one. The ZELP wearable includes a solar cell and thermoelectric generator and is designed to work for up to five years of continuous use.

Animal welfare is at the heart of the company’s design, and the beta version of the halter is being field-tested on a range of breeds and in a variety of locations. Development plans include analysing the impact of different diets on volumes of methane production and identifying ways to further support producers through additional data points.

Finding new ways to integrate agriculture with city life is leading to a range of innovations in urban growing. Springwise recently spotted disused office space transformed into smart vertical farms and an empty rooftop remodeled into an organic farm.

Written By: Keely Khoury
Takeaway:

Climate-smart beef and dairy products could be a new area of focused development for the food industry. After years of growth in demand for organic, vegetarian and vegan products, an omnivorous diet that includes carbon neutral (or possibly even better - carbon negative) types of food could appeal to a significant range of communities. It will be interesting to see how interest in and acceptance of lab-grown proteins evolves and matures as part of the new approach to feeding the planet’s hungry.