

'Methane backpacks' capture cow farts, turn them into green fuel



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It's common knowledge that certain types of organic waste can be harnessed as energy sources, with UK firm [2OC](#) even recently turning huge greaseballs found in the country's sewers into power for local homes. Now Argentina's [INTA](#) governmental research body has developed cow backpacks that trap the methane they produce in order to turn it into green energy.

According to the Environmental Protection Agency, [methane accounts for nine percent of all greenhouse gas emissions](#) in the US, and the agriculture sector is the primary source of these emissions. Recognizing that methane released into the atmosphere is damaging to the environment, but valuable as an energy resource when captured, scientists at INTA developed a system that places a [cannula tube](#) into the digestion tract of cattle in order to directly collect any methane produced. The tube runs from the cows' rumen into an inflatable bag secured to their back. Each sac gets filled with the 1,200 liters of various gases emitted each day, which is then taken to a lab to separate the 250 to 300 liters of methane contained inside. The gas can then be compressed and stored in containers, ready for use to power a fridge or even a car.

According to INTA, the trial of the system has now concluded but the team's proof of concept could be used as the basis of a much larger scale program in the future. Although there could be potential concern for the wellbeing of the animals, each cow was anesthetized for the insertion of the cannula and the backpacks weigh no more than 500g each. Additionally, the program actually tackles two big environmental problems — the release of climate change causing methane and the production of green fuel. Could we see this idea being rolled out across farms in the future?

Website: www.inta.gob.ar

Contact: www.inta.gob.ar/contacto