



Armenis Farm Biogas Project

Turning animal manure into clean energy

The Armenis Farm Biogas Project is located on a pig farm in Limassol Province on the island of Cyprus. Biogas from livestock manure is captured and burned to produce electricity and heat.

Armenis Farm is located in a rural area near Monagroulli village in the south of Cyprus. It is surrounded by several other pig farms. In the past the manure from these farms has been left to decay in open lagoons. As you may imagine, this creates an unpleasant environment for neighbouring communities, as well as polluting the air and water. The practice also produces large amounts of methane, a powerful greenhouse gas that is 25 times more potent than carbon dioxide. This new project is taking this harmful waste and using it to produce clean energy for the farm and beyond.

At Armenis Farm the animal waste is now fed into a digester tank rather than open lagoons, where the methane is captured and concentrated. The methane is then burned in a Combined Heat and Power (CHP) plant to produce electricity and heat. This energy is used on the farm, including to power the digester itself, and surplus electricity is fed into the national grid.



“The registration of these carbon projects has made the introduction of the biogas technology possible, which is new to Cyprus.”

– Danish Energy Agency



The project generates approximately 11,000 carbon credits each year for the avoided methane emissions. The greenhouse gas emissions saved by using the methane for energy in place of fossil fuels are not measured in order to earn credits, but are nonetheless an important additional benefit.

This project was one of the first of its kind in Cyprus. Previously there were significant barriers to implementing this kind of project, including lack of access to technology, high capital costs and the difficulty of negotiating with the local electricity authority. Carbon financing provided the technical and financial support needed to overcome these challenges. The project has created a clear model that will pave the way for others like it in Cyprus.



Project snapshot

Name	Armenis Farm Biogas Project
Location	Limassol Province, Cyprus
Type	Biogas
Emissions prevented	10,800 tonnes of CO ₂ e per year
Standard	Verified Carbon Standard

Benefits Beyond Carbon Reduction

The Armenis Farm Biogas Project not only reduces greenhouse gas emissions, but also creates a **healthier and safer local environment**. The new technology has **improved local air quality** by replacing the standard practice of treating manure in open lagoons, where it creates an unpleasant odour and releases highly combustible methane and other toxic gases. The open lagoons were also a **safety hazard** for farm workers and livestock.

Wastewater discharge is also reduced, **improving local water quality**, and the absence of solid waste **prevents soil and groundwater pollution**.

More broadly, the project **supports local investment and employment** in the agricultural sector. It also improves **energy security** in Cyprus by providing a local source of clean, renewable energy, reducing the island's dependence on fossil fuels.

Armenis Farm is already processing waste from several neighbouring pig farms, which has **expanded the project's scale and impact**. The success of this project will lead to the spread of the technology within the livestock industry, as well as to other industries such as waste and food processing.



For more information

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