



Reduction of methane and new energy from biogas

After various crises, Moldova is one of Europe's interesting economies with unimagined opportunities, especially in rural development. This primarily includes agro-industrial potential such as biogas and biomethane from waste. Because of its democratic role and solidarity with Ukraine, Moldova is also important as a hub for medium-term infrastructure development. As the leading company in the consortium, the Lower Franconian consulting company Spelleken Assoc. has prioritized the topic of biogas since 2018 and is now presenting several projects that aim to end pollutant emissions, climate risks and rural agony in Moldova with opportunities for a new quality of life in the countryside. We are a German-Moldovan consortium that adapts to your situation depending on your requirements and municipal wishes.

Projects on macro, meso and micro levels

We are currently preparing two multilaterally financed macro-projects to reduce methane in Moldova. We will publish details after kick-off in November 2023:

1. One project is based directly on efforts to inform the population about the blessing and curse of manure: if it is dumped into rivers and lakes, it harms the climate and the environment through eutrophication. The degraded Bîc river or the polluted Nistru show it to every Moldovan. That's why Spelleken Assoc. with MRK two years ago have written the handbook for Moldovan and Ukrainian farmers on manure handling practices for the German Federal Environment Agency. The medium-term project is about regulating the use of manure and the administrative processes that will lead to the sensible and therefore environmentally friendly use of manure as fertilizer.
2. The second project in the area of methane reduction is of a legislative nature and aims to streamline and modernize administrative processes including technical measurement procedures, statistical surveys and international cooperation to reduce harmful methane emissions in industry, agriculture and the energy sector. In a consortium of Moldovan NGOs, we are developing national techniques and processes that will sustainably modernize Moldova in terms of methane reduction.

Municipal biogas as a key technology for decentralization

At the meso and micro levels, we are building on years of preparatory work on the topic of biogas. Biogas is created during the anaerobic digestion of organic material and then contains biomethane, carbon dioxide and trace gases (H₂S, H₂O). As a carbon-neutral energy source, biogas supplies electricity, heat or natural gaseous biomethane for base and peak loads. This approach allows recyclable materials from green waste and organic waste bins to be processed into renewable energy or biomethane, which are harmful to the climate and largely unused in terms of energy efficiency. In Moldova we have three projects in preparation that have the following profile and release both entrepreneurial (micro) and municipal potential:



1. In the eastern small town of Coșnița, in a bend in the Nistru river, a bioenergy village is being built in which companies, citizens and the community will work together in a model way to build a municipal biogas plant. The slurry of the pig farm is the base of feasibility. The working group creates a local operating company that shows the whole of Moldova and the region how part of the heat and almost all of the electricity is generated itself.
2. Such models are also emerging as citizen energy for Moldova. The country has a strong civic dynamic with a lively democracy from the local initiative to the capital, be it on the part of the town hall, independent NGOs or, for example, in the Grup Actiune Locale (GAL) system. Our campaign, carried out with German co-financing and www.innova-eg.de, is intended to give Moldovan citizen energy a big boost in 2023 and 2024, similar to the 1000 citizen energy cooperatives that already exist in Germany.
3. Biogas in the narrower sense should be produced in farm and municipal systems throughout the country. The Maschinenring Kommunalservice (MRK) www.mrgoettingen.de, which has been active in Moldova since 2017, is therefore supporting local investors in 2024 who want to build new and highly profitable biogas plants throughout the country.

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