THE IMPOSSIBLE IS POSSIBLE

On evenings when absinthe is mixed with the ghosts of the Czech Revolution in the bars of Prague, ethanol is not just a drink, but rebellion in the glass. Freedom won. Rewritten visions of the future. A reminder that in 1989 the unbearable shattered, fell and the impossible made history – when "someday" became "now".

That's why it feels just right to toast Biotech Energy Farm Holding GmbH today. Because in the world from E10 to E85, D95 and SAF, the joke has long been circulating that the acronym secretly stands for "Someday, Alternative Feedstocks". It's unfair to ethanol – an early technological triumph and a real turning point for mobility – which simply has the rarest flaw shared by gold, lottery winnings and sunshine: there's not enough of it.

Nevertheless, the "someday" problem has weighed heavily on the biofuels sector for years and is used just as often (and with about the same optimism) as the term "government shutdown". And "someday" has a sound all its own in Prague – the clinking of glasses and the echo of the crowds that once gathered on Wenceslas Square, waiting for a future that seemed impossible until it suddenly wasn't. And it didn't happen in Prague – it happened in Berlin and Hamburg.

The breakthrough: A world premiere

Groundbreaking successes in biofuels are rarely celebrated with confetti – they are achieved with certificates and operating permits. But in recent months there has been a real milestone: The technology, in which residual stocks from protein feed production are used to convert CO2-neutral ethanol, has been recognized by the German Patent and Trademark Office and registered as a utility model.

This technology forms an important non-fossil, globally scalable pillar in the transport sector – the first path to commercial biotech energy technology. After more than a decade of research, technical optimization, catalyst tests and the odd hurricane, Biotech-Energy is ready to produce.

This quantum leap is a relief for all those who have been wondering about bioethanol: "Where are the quantities?" The plants that Biotech-Energy can build and operate can produce from 60 kt to well over 100 kt per year – an output that significantly exceeds the pilot test carried out in 2016 with 4,000 liters. What began with laboratory cups and pilot tests is now a real option for industrial production.

Freedom from raw materials: Why ethanol changes everything

Bioethanol opened the door, but the limits were foreseeable from the beginning. The global pool of raw materials is in constant discourse (plate vs. tank) with the food industry. This pool is simply not enough to meet the demand for modern biofuel and food. Biotech-Energy's ethanol, on the other hand, is completely different – a technology with a global reach and the ability to produce liquid biofuel and bio-CO_2 from almost any protein-containing feed without taking up additional agricultural land

The raw material universe for ethanol:

Thanks to the enormous quantities of feed grain amounting to 1.6 billion tons required annually in fattening and milk production, sufficient raw materials are available for a better supply of protein feed and the production of bioethanol.

As Bernd Ahlers, initiator and founder of Biotech-Energy Farm Holding, always emphasizes, the strategy was divided into two parts: first, the production of the world's best protein feed, and second, the conversion of the residues into high-quality biofuels. Ethanol is not only versatile, ethanol is one of the most versatile input sources ever used for advanced fuels. It was chosen as the molecule that can connect local resources to global markets.

Fifteen Years of Perseverance: The Road to Biotech-Energy's Technology

The roots go back over a decade to a bold research question: Can ethanol be produced on a large scale without wasting food and agricultural resources?

Bernd Ahlers began testing the chemical processes in the early 2010s in cooperation with GEA-Wiegand, one of the largest plant manufacturers in the EU. What followed can become one of the most planned and disciplined scale-ups in recent industrial history.

Key milestones:

- 2010–2015: Initial feasibility studies, investigations and tests on existing plants.
- 2015: Saxony-Anhalt State Institute carries out feeding of concentrated feed to dairy cows.
- 2016: Development and start of construction of a feed/ethanol plant in Hungary.
- 2017: The Hungarian government stops the project for reasons of owner-occupancy.
- 2022: Registration of the Ahlers technology at the German Patent and Trademark Office in Munich.
- 2024: Founding of Biotech-Energy Farm Holding GmbH.

This process is the exact opposite of "overnight success". It stands for 15 years of perseverance, or, to put it in the words of Ahlers: a system that continuously transforms entropy into structure, iteration into performance and setbacks into dynamics.

The construction of the world's first commercial biotech plant is now to be realized in Romania.

Result

- The road to diversification of environmentally friendly cars remains rocky:
- Daily production must increase.
- The capital must be increased.
- Market prices must be stable.
- More plants urgently need to be built.

Now, Biotech-Energy has two scalable, market-ready routes – an improved protein feed with the option to reduce methane emissions from cattle by up to 90%, and ethanol-based fuel production. A diversified biotech-energy system is finally taking shape. Not because the hard work is done, but because the system has reached the stage from vision to implementation. We haven't quite reached the tipping point for biotech energy yet. But we can recognize him now.

For more information, please contact us at: info@biotech-energy.com