

# FREYTECH INC.

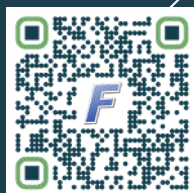
## REMOVE GREENHOUSE GASES AND ODOR

In Any Indoor Facility or Outdoor Area In Real Time / Continuous / Long-Term Basis Without Electricity or Other Consumables

Access Sustainability Linked Loans With Lower Interest Rates



Monetize By Generating CO2e Credits



### ENVIRONMENTAL BALANCE DEVICE (EBD TECHNOLOGY)

#### SCIENTIFICALLY VALIDATED

- Certified by the Ministry of Science and Innovation of Spain
- Certified "Safe to Use" by Florida International University (USA)
- Verified by NWTC College (Wisconsin, USA) for methane gas removal (average of 63%)
- Proven by the Polytechnical University of Cartagena (Spain) to eliminate up to 98% of GHGs and ammonia gas

#### EFFICIENT & SCALABLE

- Installs in hours, not months
- Residential, Commercial and Industrial
- 15-year service life / minimal maintenance

#### COST-EFFECTIVE & SUSTAINABLE

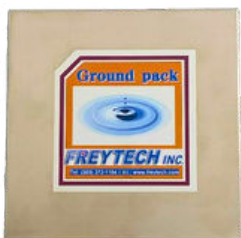
- On time & under budget, No training is required
- Operates without chemicals or electricity



EBD Space Odor  
90 x 90 x 24 mm



EBD Soil Pack  
90 x 16 mm



EBD Ground Pack  
110 x 110 x 8 mm

[freytech.com/environmental-balance-devices/](http://freytech.com/environmental-balance-devices/)

**WHAT IT IS:** Environmental Balance Device (EBD) technology consists of compact, easily deployed units designed to support and enhance natural biodegradation and biotransformation in polluted air, water, and soil. In polluted air applications, EBD systems are associated with measurable and sustained reductions in greenhouse gases (GHG), including methane, ammonia, flue gases, as well as offensive odors, through ongoing atmospheric biodegradation and biotransformation processes. This is achieved without using electricity, consumables or labor. EBD has operated at TRL9 level since 2018 and is in use on an industrial scale in Europe, North America, and in the Middle East.

**HOW IT WORKS:** During EBD technology development, we focused, in part, on "Reactive Oxygen Species (ROS) which is a collection of highly unstable, oxidizing oxygen-containing molecules that originate from industrial activities, combustion processes, and pollution, as well as biological and environmental generators. High levels of ROS are known to damage microbial DNA, proteins, and lipids, significantly inhibiting their metabolic functions essential for effective bioremediation, biodegradation and biotransformation. High ROS levels overwhelm microbial ability to break down and transform pollutants.

EBD units are engineered systems designed to interact with ambient environmental fields, influencing local electrochemical conditions and energy balance within air, water, and soil environments. These interactions are demonstrated to modulate local electrochemical balance, contributing to more stable molecular and ionic conditions that influence redox behavior and microbial energy exchange.

Our proprietary, science-driven approach manages disorder and energy dispersal in a nature-positive manner. EBD systems contain proprietary mineral compositions, including high-entropy metal oxides, which are demonstrated to support electrochemical stabilization and facilitate more favorable electron-transfer conditions within the surrounding environment. This process is proposed to reduce the persistence of unstable ROS, contributing to a shift toward more stable oxygen species within air, water, and soil environments. This reduces microbial stress, promoting optimal conditions for their metabolism and ion regulation. These small yet cumulative, progressive, stabilizing effects are greatly amplified and sustained over time via biological feedback loops, leading to significant, verifiable and continuous, long-term improvements in remediation efficiency without adding external energy.

**GREENHOUSE GAS & FLUE GAS:** EBD systems are proposed to influence local energy distribution and electrochemical interactions in ways that support native microbial activity and enzymatic function, which contribute to sustained reductions in certain atmospheric greenhouse and flue gas in real time. These include, but are not limited to, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) (super pollutants), hydrogen sulfide (H<sub>2</sub>S) carbon dioxide (CO<sub>2</sub>), ammonia (NH<sub>3</sub>), Oxides of Nitrogen (NO<sub>x</sub>) - and corresponding offensive odors - in any size indoor facility as well as expansive outdoor areas. Observed reductions in greenhouse and flue gas concentrations are demonstrated to result from a combination of enhanced biological processing and altered chemical stability, with downstream transformation pathways remaining an active area of investigation.

There is ample GHG and flue gas emission reduction data generated in a number of EBD treatment applications and sectors. We propose that the microbes present in and around the EBD treatment area break down the GHG and flue gas molecules into simpler harmless monatomic and diatomic gases that are released as byproducts back into the atmosphere and the remaining carbon is consumed by these microbes for their energy and structural building block needs.

**CLIMATE SOLUTION:** EBD is positioned as a climate-support technology by contributing to measurable reductions in greenhouse, flue gas and ammonia emissions under real-world operating conditions. It is an affordable, sustainable, and highly scalable Climate Solution tool that meets UN Sustainable Development Goals (SDG) while providing superb odor control and improved air quality.

**APPLICATIONS:** Oil fields, landfills, wastewater treatment plants, municipal zones with poor air quality, factories, manufacturing plants, oil refineries, animal barns, lavatories, and food processing plants to name a few. Contact Freytech Inc. for a complete list of applications, sectors and benefits.

**EBD IS ALSO A FINANCIAL TOOL:** Public and private sector entities that implement EBD technology to remove GHG emissions can qualify for Sustainability Linked Loans (SLL). These are offered by most global banks providing reduced interest rates—usually 5-25 basis points—for meeting sustainability targets like Scope 1, 2, and 3 emission reductions, following SLL Principles. SLLs are flexible and may be used for general business needs including refinancing, M&A, or working capital.

**SERVICE LIFE:** EBD system service life exceeds 15+ years. No permitting or infrastructure is required.

**COMPLIANCE, ENHANCED ESG REPORTING & COMPETITIVE ADVANTAGE:** EBD systems provide valuable tools to private and public sector GHG emitters wherever located.

**European Union (EU):** The EU Emissions Trading System (ETS) Directive is a key part of the Fit for 55 Package and vital for companies in the EU to meet climate and financial requirements.

**Non-EU Companies:** The EU Corporate Sustainability Reporting Directive (CSRD) has global reach obligating companies that export to the EU to report their gas emissions. EBD systems can help those exporters meet the CSRD requirements in order to stay competitive in the EU.

**USA:** EBD meets California's Climate Crisis Act (AB 1279, 2022) and Senate Bill 32 (SB 32) requirements

**UAE:** EBD meets UAE's ROCC Law (Federal Decree-Law No. 11 of 2024), National Determined Contributions (NDC). EBD helps nations meet their NDCs