

**SEAI National Energy Research, Development & Demonstration Funding Programme**

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# GEBTech & GEBTech Plus: Green Energy Boosting Technology

## Abstract

Commercial development of a treatment additive for stored manures to reduce gaseous emissions and generate renewable energy.

## Research Outcomes

- 80% methane reduction
- Manure → improved fertilizer
- 70-80% malodour reduction
- >2x increase in AD biogas output

## Recommendations

### Achieve binding national GHG reduction targets

1. Insertion of GasAbate (GEBTech) on National Inventory
2. Widespread adoption: TAMS (equipment fit-out), EPA (BAT) approved methodologies (odour reduction), Inclusion on processor sustainability programmes, Reward green practices through subsidy payments.

### National Biomethane Strategy

1. GasAbate-treated slurry allows for achievement of goals
2. Reduces reliance on energy crops
3. Consistent, year-round feedstock supply
4. RED II compliance
5. Feed-in-tariff critical

**Potential National Impact**

- 9.4% reduction in Agri. GHG emissions
- 3.5% reduction in National GHG emissions
- Most cost-effective slurry strategy:
  - €57/T CO<sub>2eq</sub>
  - Cost carbon:
    - 2024 €56/T CO<sub>2eq</sub>; 2030 €100 T CO<sub>2eq</sub>

**Without culling a single animal**

