



Bio360 2025 award winners

Gold Innovation award



CH4 Process

BIOGAS category

Characterisation and regeneration of biomethane purification membranes



CH4 Process company offers a new service to analyse the performance of ceramic membranes and recondition them where necessary. This innovation appealed to the jury because of its relevance to market needs and its positive economic and environmental impact. The idea of reconditioning equipment that could supply a second-hand market or avoid having to buy new equipment is completely in tune with the times: re-use. The application was well documented, with scientific evidence to back it up.



KiRa Technology

BIOCHAR category

BioGS-1.0



KiRa Technology appears to have cracked a tough nut with its micro-CHP system, using advanced pyrolytic gasification to produce 1 kWe of electricity and heat from diverse biomass, including agricultural residues. The BioGS-1.0 process generates biochar with over 90% carbon, adding value as a soil enhancer or carbon sink and enabling negative emissions. Backed by a growing number of units operating in exacting, remote locations, its early market validation places the BioGS-1.0 on the cusp of potentially making a significant impact in small-scale applications.



Néolithe

CDR category

l'Anthropocite



Néolithe's innovation is embedded in the transformation of non-recyclable, non-hazardous waste into aggregates for concrete, offering a circular alternative to landfill and incineration. Its patented Accelerated Fossilisation® process reduces CO₂ emissions and sequesters biogenic carbon, halting its release into the atmosphere. With an ambition to scale up to 100,000-tonne plants, Néolithe benefits to society lie in creating local circular economies, supporting the construction industry, and driving progress toward carbon neutrality.



ProGranul France

BIOMASS category

Greased for Life Rollers



Prodesa's Lifetime Lubricated Rollers (LLR) feature a lubrication-free design, using less than 1kg of grease per roller for its service life. With a specialized lubricant for PROGRAMUL systems and a focus on maintaining oil film integrity, they reduce maintenance, prevent pellet contamination, and lower environmental impact. Proven through thousands of operational hours in high-pressure environments, LLR rollers demonstrate consistent performance and market readiness with significant operational benefits.

Innovation



the Winners

Silver Innovation award

methagora



Methagora
BIOGAS category
Mobile gas



Methagora offers a solution for injecting portable biomethane. Although the subject is not new, it has never been implemented in France before. This French first therefore serves as a benchmark for the biomethane sector and will provide interesting feedback. The jury therefore congratulates this initiative.

Carried biogas enables AD units far from the gas network to inject their biomethane as well as to share the injection station with others. The application submitted to the jury was very well detailed, both technically and economically.

Calpech



Calpech
BIOGAS category
CE-IN Biogas



Spanish company Calpech has developed an additive based on a by-product of the olive oil industry to optimise biomethane production. The nanoparticle produced is composed of iron oxide and carbon. Added in small quantities to digesters, the additive reduces H₂S production and optimises biogas production, with results

of up to 40% more biogas. This biosourced additive therefore represents an innovation for the industry in both economic and environmental terms.