Gold Innovation award

Proxipel (ch)

BIOMASS ENERGY

PROXIFLEX - Mobile, integrated pelletisation unit

stand B09

PROXIPEL
Generate value from your biomass

A Gold Prize is awarded to **Proxipel** in the **Biomass Fuels category** for delfor delivering a robust, industry-ready innovation that fundamentally improves the fuel production logistics for the valorisation of, in particular, stranded solid biomass.

Proxipel's mobile, road-legal pelletisation unit integrates grinding, patented high-performance drying, pelletising and cooling into a single, autonomous mobile system capable of processing high-moisture biomass directly at source. By producing ISO-compliant pellets on site, the solution eliminates the costly and inefficient transport of wet biomass, significantly reducing emissions, operating costs and logistical constraints.

Proxipel demonstrates how practical engineering innovation can unlock local bioresources strengthening closed circuit, local biomass value chains and energy sovereignty.

As with all innovations, market adoption will ultimately depend on the ability to economically replicate consistent performance under real-world operating conditions. For mobile systems, these challenges are inherently greater than for fixed installations. Should Proxipel successfully meet this challenge, the outlook would rapidly shift from promising to proven.

Don't miss the **innovation awards ceremony** !

Price-giving ceremony
Wednesday 5.30 pm
Renewable Gas room

Gold Innovation award

Emvolon (us)

ADVANCED RENEWABLE FUELS

Engine-based biogas-to-methanol technology

stand E50

A Gold Prize is awarded to **Emvolon** in the **Advanced Renewable Fuels category** for presenting a technologically disruptive and globally scalable innovation. Emvolon's unique approach – repurposing automotive engines as chemical reactors for on-site methanol production from biogas streams – represents a clear break from conventional, highly centralised and capital-intensive e-fuel and e-methanol production pathways.

By combining modularity, energy self-sufficiency and low capital intensity, the solution radically improves the economics of green methanol production and enables deployment close to both biogenic feedstocks and end-use markets. The technology removes reliance on large infrastructure, grid electricity and complex upstream systems, making it particularly well suited to distributed, biogas-rich contexts.

Silver Innovation award

Uniconfort SRL (it)

BIOMASS ENERGY

e-SNCR on Control Cabinet with PLC

stand G16

A Silver Prize is awarded to **Uniconfort**'s **e-SNCR solution** distinguishes itself not by reinventing NOx reduction chemistry, but by significantly improving the deployability and operational reliability of SNCR systems for biomass installations. Its self-contained control cabinet with dedicated PLC enables rapid retrofitting without modification of existing plant controls, while automated anti-crystallisation cleaning addresses a major operational weakness of conventional SNCR systems. Independent third-party emissions measurements confirm meaningful NOx reductions with limited ammonia slip. This combination of engineering optimisation, cost efficiency and market readiness positions e-SNCR as a pragmatic, industry-ready innovation with strong commercial relevance.

Certificate of Commendation

A Certificate of Commendation is awarded to Anthropîle in the Biogas category. The service aims to provide an agronomic solution enabling the use of land contaminated with organic pollutants and the valorisation of the resulting contaminated biomass through an anaerobic digestion pathway.

The jury highlights the quality of the work carried out, supported by rigorous scientific sources and pilot-scale testing. Using plants as a tool for biomass production on otherwise uncultivable land opens the possibility of treating large, contaminated areas at costs that could be more competitive than conventional decontamination solutions.

However, the market acceptance of anaerobic digestion as a tool for pollutant treatment remains a significant open question. In particular, the fate of the digestate – which would retain residual, non-destroyed pollutants - raises important concerns. Could such digestate be returned to the soil? At a minimum, regulatory changes would be required to consider this, especially in a context of increasingly stringent regulations governing the land application of organic residual products, including digestates.

Anthropîle (fr)

BIOGAS

Valorisation of contaminated biomass through an anaerobic digestion pathway

stand B46

anthropîle
INNOVER, CONSEILLER, AGIR

A Certificate of Commendation is awarded to Phambili Energy's « Jenga Bio Fusion Nutreebag » solution in the Biogas category. It proposes an original approach to precision fertilisation, combining biochar, micronutrients, microbial inoculants and bioactive compounds in a pre-dosed, root-zone delivery format. The jury recognises the strong agronomic rationale, ease of use for farmers, and relevance for horticulture, forestry and smallholder agriculture, particularly where input efficiency and soil resilience are critical. The integration of traceability and the focus on practical deployment further strengthen the proposition.

The novelty lies mainly in formulation and delivery rather than in a fundamentally new process and the jury notes that several performance and environmental claims would benefit from additional independent, larger scale validation, and that carbon sequestration, presented as a co-benefit, remains to be fully quantified and verified over the long term.

The Jury's Certificate of Commendation recognises the innovation's promising and pragmatic nature, while encouraging Phambili Energy to further strengthen technical validation, scalability and market uptake.

Phambili Energy (za)

BIOCHAR

Jenga Bio Fusion Nutreebag

stand C22

phambili energy
SOUTH AFRICA