

Antec

Creating our renewable future



“ 68% greater gas production per year using Antec reactors compared with today's production at Southern Follo Treatment Plant with the same amount of sludge. Economically, there are savings associated with large amounts of the disposed sludge, as well as electricity for heating and operation of the wastewater treatment plant. ”

Southern Follo Treatment Plant, Ås, Norway

About Antec

Antec has since 2009 developed a technology that drastically improves the efficiency and profitability of biogas production. Their concept allows biogas producers to reduce production time, and substantially reduce CAPEX and construction time, compared to the market standard. The reactor is designed to handle sewage sludge, household waste, organic industrial waste and agricultural waste. The technology is highly modular, functions independently and is suited for a range of users, including farmers, households, manufacturers and wastewater plants.

www.anteobiogas.com

Key information

Founded: 2011

CEO: Eirik Gundersen

HQ: Oslo, Norway

Impact theme: Circularity

Industry: Renewables

Impact potential

5/5 | Impact-generating

SDG targets contribution



Net impact score

+57% | +68%¹

1. Applying Norselab custom value set mapped to SDGs

Antec

Sustainability challenges

GHG emissions from energy

Global energy-related emissions rose by 6 percent in 2021 to the highest level ever.

Organic waste

The world generates 2.2 billion tons of municipal solid waste annually, with organic waste representing about half. Conservative estimates indicate that at least 33 percent of that is not managed in an environmentally safe manner. Recent research has estimated that by 2030, the planet will be generating at least 5bn tons of organic human and animal waste each year. Ineffective disposal of organic waste results in air and water pollution.

Energy security

Reliance on fossil fuels is a key energy security concern in the current market environment. Russia is the world's second-largest producer of natural gas and has the world's largest gas reserves. Russia is also the world's largest gas exporter.

Theory of change

Modern biogas production prevents emissions across the whole value chain with a three-fold emissions mitigation effect.

Firstly, biogas production prevents the emissions of the decomposition of organic residues. Secondly, the biogas produced displaces fossil fuels as energy sources and can be used in all sectors. Thirdly, the digestate obtained in the biogas production process as biofertilizer helps return organic carbon into the soil and reduces demand for the carbon-intensive production of mineral fertilizers.

Modern bioenergy is an essential source of renewable energy, and its contribution to final energy demand is five times higher than wind and solar photovoltaic combined.

Antec has developed a technology that drastically improves the efficiency and profitability of biogas production and turns waste into pure energy in seven days. Their reactor allows for 3-5 times faster biogas production, representing up to 80 percent improvement while significantly increasing gas yield.



Target 7.2



Target 13.2



Target 12.2



Target 11.6



Target 3.9

66 GWh

Installed capacity

70 000

Tons estimated waste treated annually

20 000

Tons estimated fertilizers produced annually

From 2022 onwards

Volume of wastewater treated