

Success story

Industry: Energy



The Unistream offers the right balance between functionality and simplicity and is therefore an ideal fit for our application. With the Unistream we succeed in running our 'mini-factories' at the locations of our customers.



PLC
+ HMI
ALL IN ONE™

Can PLC control make it easier to create clean, environmentally friendly biogas?

Summary:

Greenmove Technologies, a bio-energy company, created a unique Greenstep® technology to convert lignocellulosic mass into biogas more efficiently than was previously possible. A key component of this technology is the UniStream PLC + HMI control platform; Unitronics UniStream all-in-one PLC enables Greenmove to install automated mini-factories at customer sites.

Greenmove Technologies (www.greenmovetechnologies.com) is a CleanTech company based in the Netherlands. They produce bio-energy and green chemicals as part of their vision for a more sustainable world. Their unique Greenstep® technology allows Greenmove to improve the performance and cost-effectivity of biogas production.

Lignocellulosic biomass, dry plant matter, is one of the most abundant resources on earth; however traditionally this biomass has been difficult to convert to biogas efficiently. Greenmove found a solution. Their Greenstep® reactor uses natural fungi to produce various enzymes. These enzymes are used on-site to boost the biogas production; using the Greenstep enzyme cocktail results in a 20-30% better yield of biogas.

Greenmove's process is fairly complex; the enzymes produced by the fungi need to be fed into the fermentation process, where the lignocellulose is broken down into biogas under anoxic conditions. The process involves a variety of pumps, valves and sensors, which are all controlled by a Unitronics UniStream PLC + HMI.

The all-in-one design of the UniStream was a huge advantage for Greenmove, as they have a stand-alone application; they were able to get an HMI, PLC, data storage and remote connectivity in one package with no additional costs for software or utilities. Jeroen Tideman of Greenmove says "Compared to the alternative of an industrial PC, the Unistream is cost competitive. The Unistream offers the right balance between functionality and simplicity and is therefore an ideal fit for our application. With the Unistream we succeed in running our 'mini-factories' at the locations of our customers." Greenmove is committed to making their process efficient and cost-effective; using a UniStream PLC+HMI helped make that a goal a reality.



UNITRONICS
www.unitronicsPLC.com