



## Levidian Strikes Deal with Luxembourg's Stugalux for LOOP Tech Implementation

2023-04-22

Levidian has announced a deal with Luxembourg construction company Stugalux to bring its innovative decarbonization technology to mainland Europe for the first time.

[Levidian](#)'s LOOP device uses a patented low temperature, low pressure process to crack methane into its constituent atoms, hydrogen and carbon, without the need for catalysts or additives. The carbon is locked away in the form of graphene. [Stugalux](#) will be deploying LOOP to process biomethane produced from food and agricultural waste. This gas will be cracked into its constituent atoms by LOOP, with the resultant hydrogen-rich blend combusted in a turbine to generate electricity while reducing carbon emissions. The graphene produced by LOOP will be integrated into the building products used by Stugalux to improve performance and drive further decarbonization.

Stugalux will initially deploy a LOOP20 on the site. Once this process is ready to be enhanced, two LOOP100 systems will be deployed by 2025, to scale up the decarbonization operation.

Levidian CEO, John Hartley, said: "Stugalux is a fantastic example of how a LOOP system can be used to decarbonize in three ways simultaneously. By processing agricultural biomethane, these LOOPS will be utilising waste gas, delivering hydrogen to power, and embedding graphene to decarbonise construction products. This is an incredible way to demonstrate the circularity of LOOP contributing to a cleaner economy."

Stugalux owner, Joel Schons, explains: "Together, the three LOOP systems will process nearly 250,000 cubic meters of waste gas per year, producing more than 30 tonnes of graphene and preventing 572 tonnes of CO<sub>2</sub>e every year. Moreover, the application of graphene enhanced materials in our residential constructions will significantly drive the reduction of the carbon footprint."

Read the [original article](#) on Graphene-Info.