SIMULTANEOUS BIOGAS UPGRADING AND BIOSUCCINIC ACID PRODUCTION IN A MODULAR PLUG-AND-PLAY UNIT BASED ON A PATENTED TECHNOLOGY

GOAL AND PRODUCTION PROCESS

NEOSUCCESS

Goal
Make commercially available a unique technology based on a plug and play technology

Neosuccess Technology
Biogas upgrading to BioMethane + BioSuccinic Acid production

USP PROCESS

The UpStream Process (USP) takes biogas and a sugar rich residue and produces BioMethane and BioSuccinic Acid

Fermentation Module
BioCH₄

DSP PROCESS

UpStream (fermentation unit)

Filtration
Neufiltration
pH Control unit
Spray dryer

The DSP is an industrial unit where the BioSuccinic Acid (BSA) stemming from the USP is recovered

LOCATION

OUR FACILITIES

Valencia, Spain

USP Unit
DSP Unit

CONCLUSIONS

The NEOSUCCESS technology and unit will soon be ready to appear in the market!

Biological simultaneous upgrading to BioMethane and co-production of BioSuccinic Acid

First industrial unit currently being operated

98% CH₄ purity
35 g/L of BioSuccinic Acid

CONTACT

Web page: https://neosuccess-project.eu/en/
Twitter: https://twitter.com/NeosuccessP
Linkedin: https://www.linkedin.com/company/neosuccess-project/

OPTIMIZATION OF OPERATING PARAMETERS

Main objective
Support the optimization process and resolve upscaling challenges of the industrial unit through ongoing retrofit of R&D activities at lab scale

Optimization would target the following issues:
To optimize the microorganism activity to real industrial conditions
To establish the optimal fermentation conditions
To develop an appropriate process for efficient integration of upstream fermentation and downstream processing

Improve the bioconversion efficiency of the organic substances contained in real industrial feedstock

To establish the optimal fermentation conditions

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