

Increased energy eff. of 30% for amine scrubbing systems resulting in 10% more green gas production

Publieke samenvatting / Public summary

Aanleiding

Increase of the green gas production of new and existing plants that upgrade biogas via amine scrubbing with up to 10%.

Doelstelling

Goal of this project is up to 30% reduction of regeneration energy compared to state-of-the-art and 100% when low temperature waste heat is available.

Korte omschrijving

To produce sustainable natural gas (green gas) from biogas, it has to be upgraded to meet the grid entry specifications. The operating costs in a biogas upgrading plant are an important part of the total costs of green gas production. This project aims to reduce the operating costs of biogas upgrading and to increase green gas production, by developing and demonstrating an improved regeneration technology. This will improve the business case for green gas production and will contribute to the realization of new green gas initiatives, and therefore increase the green gas production in the Netherlands. Different technologies are available for biogas upgrading (membrane, cryogenic, gas absorption and adsorption). This proposal considers gas absorption by amine scrubbing. The advantages of amine scrubbing systems are the very low methane losses (< 0.1%) and the low electricity use. This proposal focuses on reducing the operating

Projectinformatie / Project information

Projectnummer / Project number
TEG0113003

Subsidiebedrag / Grant amount
€ 119.707,00

Algemene informatie / General information

Penvoerder / Secretariat
Nederlandse Organisatie voor
Toegepast-Natuurwetenschappelijk

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costs of the amine based absorption scrubbing systems, leading to substantial improvements in this mature technology. The project partners are the research organization TNO and the industrial parties Cirmac and Attero.

Resultaat

The project results in an innovative regeneration technology for amine scrubbers that leads to a reduction of the required energy and a higher production of green gas.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.

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