Biological Integral Biogas Upgrading

Berichterstattung

Projektinformationen

UBI

ID Finanzhilfevereinbarung: 886415

Projektwebsite

DOI
10.3030/886415

Projekt abgeschlossen

EK-Unterschriftsdatum
6 November 2019

Startdatum
1 Dezember 2019

Enddatum
30 April 2020

Finanziert unter
INDUSTRIAL LEADERSHIP - Innovation In SMEs

Gesamtkosten
€ 71 429,00

EU-Beitrag
€ 50 000,00

Koordiniert durch
TROVANT TECHNOLOGY SL
Spain

Periodic Reporting for period 1 - UBI (Biological Integral Biogas Upgrading)

Berichtszeitraum: 2019-12-01 bis 2020-04-30

Zusammenfassung vom Kontext und den Gesamtzielen des Projekts

Cleaning and upgrading biogas makes an important cost of the total expenses in biomethane production. Current physical/chemical technologies are expensive, energy intensive and are not designed for small-scale (<200Nm3/h raw biogas), with operational and investment costs increasing

exponentially in low production scenarios. This hinders the widespread production and use of biomethane. Trovant Technology is addressing this limitation with its UBI technology.
Technologies contributing to reduce the biogas upgrading costs at small scale (< 200 Nm3/h) hold the potential to unlock a whole new market for distributed biomethane production, mainly in the livestock farming sector. This will entail substantial environmental benefits while at the same time contributing to the sustainable development of rural and isolated areas promoting innovation and employment.
The objective of this project is producing a solid feasibility study covering all the aspects required prior to market launch was performed: detailed analysis of the technical development needed, in-depth commercial feasibility study including a detailed market assessment; and a thorough financial plan covering all the following stages to bring UBI to the market.

Arbeit, die ab Beginn des Projekts bis zum Ende des durch den Bericht erfassten Berichtszeitraums geleistet wurde, und die wichtigsten bis dahin erzielten Ergebnisse

During the last few months, the following main activities have been developed:
- Technical progress: a lab scale prototype for UBI was built and optimized, obtaining the main operational parameters and demonstrating the concept and preliminary costs with positive results. Basic engineering design for a pre commercial pilot was developed with our engineering partner.
- Business plan: a complete business plan was produced, including technical development needs, IP strategy, freedom to operate and financial plan. Important needs were identified for team growth and a new plan was developed to incorporate new essential profiles to the team.
- Commercial development: different companies have been contacted and shown interest in supporting the UBI technology in 3 main groups: private investors, potential future clients and potential commercial partners and distributors.
- Dissemination: the EU logo and SME support was featured at Trovant’s website and the EU support was highlighted in blog posts, social media and newspaper interviews.

Fortschritte, die über den aktuellen Stand der Technik hinausgehen und voraussichtliche potenzielle Auswirkungen (einschließlich der bis dato erzielten sozioökonomischen Auswirkungen und weiter gefassten gesellschaftlichen Auswirkungen des Projekts)

During the execution of the project, the technical results show promising progress and the operating costs of the UBI technology have been reduced significantly (around 80%) from the initial operating conditions to the current optimized operating conditions. The results show that the technology is ready to be competitive in the current market vs. available alternatives. These costs can be further reduced at industrial scale.
In terms of market, Europe leads the development of biogas and biomethane technologies and market: In 2018 (most recent data available) the number of biogas plants in Europe was 18,202 while the number of upgrading plants reached 660. This makes the EU a perfect market for the launch of

the UBI technology.
Trovant Technology has decided to further pursue this project and we are already working on securing a mix of public funding and private investment to develop the next stages in our business plan including the first pre-commercial pilot.

Prototype installed in lab

Letzte Aktualisierung: 25 Juni 2020

Permalink: https://cordis.europa.eu/project/id/886415/reporting/de