



Hydrogen Europe: European Hydrogen & Fuel cell Project Database

Project HyTIME

Low temperature hydrogen production from second generation biomass

The aim of HyTime is to deliver a bioprocess for decentral H₂ production from 2nd generation biomass with a productivity of 1-10 kg H₂/d. The novel strategy in HyTime is to employ thermophilic bacteria which have shown superior yields in H₂ production from biomass in the previous FP6 IP HYVOLUTION. Biomass in HyTime is grass, straw, molasses or unsold organic goods from supermarkets. The biomass is fractionated and converted to H₂ at high efficiency unique for thermophilic fermentation. Dedicated bioreactors and gas upgrading devices for biosystems will be constructed to increase productivity. The H₂ production unit will be independent of external energy supply by applying anaerobic digestion to valorize residues. HyTime adds to the security of supply H₂ from local sources and eradicates geopolitical dependence. HyTime builds on HYVOLUTION with 5 partners expanding their research efforts. Three new industrial partners, 2 of which are NEW-IG members, have joined this team with specialist expertise in 2nd generation biomass fractionation and gastechnology. This way a pan-european critical mass in agro- and biotechnological research, the energy and hydrogen sector is assembled to enforce a breakthrough in bioH₂ production. The participation of prominent specialists with interdisciplinary competences from academia (1 research institute and 2 universities) and industries (3 SMEs and 2 industries) warrants high scientific quality and rapid commercialization by exploitation of project results and reinforces the European Research Area in sustainable issues. The partners in HyTime have a complementary value in being developers or stake-holders for new market outlets or starting specialist enterprises stimulating new agro-industrial activities to boost the realization of H₂ from renewable resources. The concept of HyTime will facilitate the transition to a hydrogen economy by increasing public awareness of the benefits of a clean and renewable energy carrier.

Project Information

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European Union through FCH JU: [Grant agreement 278855 - CORDIS link](#)

Project partners

Coordinator :

STICHTING WAGENINGEN RESEARCH

Partners :[HyGear B.V.](#)

AWITE BIOENERGIE GMBH

PARCO SCIENTIFICO E TECNOLOGICO PER L'AMBIENTE - ENVIRONMENT PARK SPA

HEIJMANS TECHNIEK & MOBILITEIT B.V.

RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN

TECHNISCHE UNIVERSITAET WIEN

WIEDEMANN-POLSKA PROJEKT SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA

VEOLIA ENVIRONNEMENT RECHERCHE ET INNOVATION SNC

Sub project(s)**Sub project 1****Country:** Netherlands**Address:**

Costerweg 50 6701BH WAGENINGEN

Sub project categories

Research

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