

Iqony tests green ammonia as fuel

Potentially climate-friendly alternative to fossil fuels

Essen. Together with the non-profit Gas- und Wärme-Institut Essen e.V. (GWI) and SAACKE GmbH, Iqony is testing green ammonia as a climate-friendly alternative to fossil fuels. The project was recently awarded funding by the state of North Rhine-Westphalia because, if successful, the results will contribute to more climate protection and resource savings.

In addition to the GWI, SAACKE and Iqony, other companies, particularly from the chemical industry, such as Bayer AG, are involved in the research project as associated partners.

In the first phase of the joint project entitled “Green NH₃ – CO₂ neutral boiler”, the aim is to test the theoretically feasible applications of green ammonia, i.e. ammonia produced in a climate-neutral manner, for combustion in boilers. The main question here is whether it is possible to design combustion processes in such a way that at the end of it, comparably low nitrogen oxides can be set as when natural gas is used as a fuel.

After completion of the first phase of the project, the focus will then be on practical implementation of the results on a larger scale in a boiler plant. “This is where Iqony comes into play,” explains Dr. Peter Deeskow, who is responsible for the project on the Essen-based energy company’s part: “In the course of the energy transition, we will need alternative sources of energy, especially with regard to natural gas. Since it cannot be assumed that smaller and distributed generation plants can be supplied with pipelined hydrogen in the short and medium term, it makes sense to think in terms of energy alternatives at an early stage so that we can still achieve the existing climate targets.”

Trial at a mobile heating plant

The plan is to carry out the practical test of the project using a mobile heating unit from Iqony. The long-established Essen-based energy company, which is also one of Germany’s largest suppliers of district heating, has a number of these units that can be used regardless of location, for example to supply energy to an existing heating network in the event of maintenance. “By testing combustion in

Contact

Daniel Mühlenfeld
Press Spokesman
T +49 201 801-4262
F +49 201 801-4250
E daniel.muehlenfeld@iqony.energy

Iqony GmbH

Rüttenscheider Strasse 1-3
D-45128 Essen
www.iqony.energy

Registered office in Essen
Registered at Essen Local Court
under number B 27667

Supervisory Board

Ewald Woste, Chairman

Board of Management:

Dr. Andreas Reichel, Chairman
Susanne Pietsch
Dr. Ralf Schiele
Ralf Schmitz

this type of mobile plant, we are rehearsing the challenges of a possible future logistics chain in fuel supply at the same time,” says Peter Deeskow, explaining the decision.

Target: Ammonia burner system ready for series production

The long-term goal of the project is for Saacke GmbH to eventually develop a burner system ready for series production based on the results of proof of concept and practical testing in order to be able to use green ammonia as an alternative fuel on an industrial scale in the future.

The project is therefore making an important contribution to exploring new and complementary solutions toward the goal of net-zero emissions. “In addition to green hydrogen, we need other energy options in place of natural gas in order to continue to be able to reliably supply energy-intensive industries in particular, or smaller and decentralized generation plants and heating grids in the future,” says Dr. Ralf Schiele, COO of Iqony, highlighting the strategic dimension of the project.

Contact

Daniel Mühlenfeld
Press Spokesman
T +49 201 801-4262
F +49 201 801-4250
E daniel.muehlenfeld@iqony.energy

Iqony GmbH

Rüttenscheider Strasse 1-3
D-45128 Essen
www.iqony.energy

Registered office in Essen
Registered at Essen Local Court
under number B 27667

Supervisory Board

Ewald Woste, Chairman

Board of Management:

Dr. Andreas Reichel, Chairman
Susanne Pietsch
Dr. Ralf Schiele
Ralf Schmitz

About Iqony

Iqony makes green energy feasible. With more than 85 years of experience in the planning, construction and operation of energy facilities, the company provides holistic solutions for the decarbonization, decentralization and digitalization of the energy supply. Iqony focuses on renewable energies and bridging technologies that can be used in a climate-neutral way now and in the future. In addition to solar, wind and geothermal energy, the portfolio includes hydrogen solutions, storage technologies, engineering services and gas-fired power plants. Around 2,300 employees worldwide implement projects for major industrial companies, utilities, cities and municipalities in numerous countries across the globe. Specializing in tailor-made solutions for complex challenges, Iqony draws on its broad and in-depth knowledge of the energy industry across the full range of technologies and services.

Contact

Daniel Mühlenfeld
Press Spokesman
T +49 201 801-4262
F +49 201 801-4250
E daniel.muehlenfeld@iqony.energy

Iqony GmbH

Rüttenscheider Strasse 1-3
D-45128 Essen
www.iqony.energy

Registered office in Essen
Registered at Essen Local Court
under number B 27667

Supervisory Board

Ewald Woste, Chairman

Board of Management:

Dr. Andreas Reichel, Chairman
Susanne Pietsch
Dr. Ralf Schiele
Ralf Schmitz