



PRESS RELEASE

Third physical meeting of the HERMES partners in Aachen

The HERMES (**H**ighly **E**fficient Super Critical **Z**eRo **e**Mission **E**nergy **S**ystem - <https://hermes-energy.eu/>) consortium partners met in Aachen, hosted by T4F and OWI, on the 14th and 15th of March in the framework of the project's third physical meeting . The project has completed already half (18 months) of its 3-year implementation period and is moving forward with the initiation of additional tasks that will eventually lead to the expected HERMES outcomes. The aim of this physical meeting was to report on the progress and the accomplishments so far and discuss the next steps.

In terms of the technical progress, currently, the majority of the experimental test-rigs is available for supercritical tests while, first results at the pressurized conditions were obtained, and the numerical models are selected and validated against literature data. In addition, the methanol synthesis process is progressing with continuous experiments utilizing molecular sieves and sorbents while also evaluating and comparing results to model predictions. Renewable fuels sizing and storage has started, culminating in the development of several scenarios and the completion of techno-economic analyses. Furthermore, within the next months, several additional activities and tasks will commence as well. Partners will start delving into a detailed analysis of the policy and regulatory framework and conduct a policy analysis for system integration, which will result in key policy actions and recommendations in order to maximize impact. In addition, the outcome of the analysis will help policy makers and authorities to support the HERMES concept and plan relevant actions. A stakeholders analysis will also start to identify, in more detail, the key players to whom the project's key results will be exploited. In addition, to increase the level of dissemination and project awareness, a workshop and a bootcamp will be organized as two training sessions on renewable fuels and combustion models in the coming months, primarily targeting the academic and specialized SME communities. These activities will be the result of further project outcomes that partners will communicate to a wider audience.

Finally, the highlight of the meeting was a visit to T4F and OWI laboratories. During the laboratory tour, the participants were able to see the current status of work on the Hermes project. On a hardware-in-the-loop test bench, T4F feeds methanol through injection system components under supercritical conditions in a loop in order to test the



compatibility of materials and fuel. Experimental data is collected in the process, which contributes to the subsequent design of the Supercritical Gas Turbine system for high stability. Furthermore, the project partners were also able to see the Hydrogen infrastructure, the rSOFC stack endurance test stations and water treatment systems for SOFC, in the T4F Laboratory.

More results and research outcomes will follow within the next period of project implementation and will be reported in scientific papers, press releases, newsletters etc., all available at the HERMES website and social media accounts ([LinkedIn](#), [Twitter](#)), so stay tuned for more.

Photos



Consortium partners at Thermen Carolus in Aachen

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HERMES project



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