#### **COMET FACTSHEET**



## **COMET PROJECT**

# **HYLLEY** - RESEARCH INTO COMPETITIVE AND PRACTICAL HEAVY DUTY HYDROGEN ENGINES

Main location: Graz (Styria)

Other locations: Leoben (Styria), Telfs (Tyrol)

Thematic area: Mobility

#### Thematic focuses

Industrialisation of the hydrogen engine for use in mobile machinery and heavy-duty vehicles

- · Optimisation of the hydrogen engine in terms of performance, efficiency and emissions
- · Establishment of a consistent development methodology for hydrogen engines
- Analysis of material damage caused by hydrogen
- Analysing hydrogen storage and pressure control

#### Planned realisation and outcomes

Hylley investigates into the hydrogen engine as a climate-neutral and sustainable drive for heavyduty vehicles and construction machinery. We want to make the hydrogen engine competitive and practical, we want to advance research topics and create development methods. Hylley is characterized by a very focused topic, pronounced synergies and an extremely strong and competent consortium. The contribution of the hydrogen engine to the realization of sustainable mobility is indispensable in the commercial vehicle sector. We face excellent market prospects.



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#### Selected company partners (max. 10):

- 1. AVL List GmbH
- 2. Forschungsgesellschaft für Verbrennungskraftmaschinen und Therodynamik mbH
- 3. Hörbiger Wien GmbH
- 4. Liebherr-Werk Telfs GmbH
- 5. Ventrex Automotive GmbH

#### Selected scientific partners (max. 5):

- 1. Institut für Thermodynamik und nachhaltige Antriebssysteme TU Graz
- 2. HyCentA Research GmbH
- 3. Lehrstuhl für Funktionale Werkstoffe und Werkstoffsysteme Montanuniversität Leoben

### Selected international<sup>1</sup> partners (max. 5):

- 1. Liebherr Machines Bulle S.A.
- 2. Liebherr-Componentes Deggendorf GmbH
- 3. Umicore AG & Co. KG

**Duration:** 01.01.2024 - 31.12.2027 (4 years)

**Staff employment:** 8 FTE, thereof 6 scientists

Management: Dr. Eberhard Schutting, General Manager

Prof. Helmut Eichlseder, Scientific Coordinator

Contact: Institut of Thermodynamik und Sustainable Propulsin Systems

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hylley.at

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 $<sup>^{\</sup>mathbf{1}}$  Partners with headquarters outside Austria