**COMET Centre (K1)**

**LEC EvoLET**

LEC Evolutionary Large Engines Technology for Sustainable Energy and Transport Systems

<table>
<thead>
<tr>
<th>Main location</th>
<th>Inffeldgasse 19, A-8010 Graz, Styria, Austria</th>
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<tbody>
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<td>Other locations</td>
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**Research programme**

- Development of **sustainable large engine technology** for the use in the **energy and transportation sector**.
- **Massive reduction of emissions** of CO2 and air pollutants as well as increasing flexibility and reliability.

**Planned realisation and outcomes**

- Zero impact engine and propulsion concepts
- Integration of digitalization strategies
- Highly flexible and fast reacting large engines for grid stabilization
- Significant increase in fuel flexibility
- Wear resistant engine components for highest loads
- Full systems integration of engine, exhaust gas aftertreatment, waste heat recovery and hybridization
- Major expansion of the virtual development process and of the test facilities

**History of establishment**

Modern large engine research at Graz University of Technology let the basis for the successful application for an industrial competence center (KIND) in the late 1990s. At the end of 2002, a limited liability company (GmbH) was founded and the brand LEC was introduced. Since 2015 the research center has been operating as LEC GmbH and COMET K1-Center LEC EvoLET.

**Selected company partners** (max. 10)

1. AVL List GmbH (AT)
2. DEWETRON Ges.m.b.H. (AT)
3. GE Jenbacher GmbH & Co KG
4. HOERBIGER Ventilwerke GmbH & Co. KG (AT)
5. Kristl, Selbt & Co GmbH (AT)
6. Miba AG (AT)

**Selected scientific partners** (max. 5)

1. Graz University of Technology (AT)
2. Kyushu University (JP)
3. MCL Materials Center Leoben GmbH (AT)
4. Montanuniversität Leoben (AT)
5. Universitat Politècnica de Valencia (ES)
6. Universität Innsbruck (AT)

**Selected international partners** (max. 5)

1. ABB Turbo Systems Ltd (CH)
2. Infineum International Ltd (GB)
3. Kistler Instrumente AG (CH)
4. OMT Officine Meccaniche Torino S.p.A. (IT)

**Duration of the COMET centre**

COMET K1 third call: January 2015 – December 2022 (8 years)

**Staff employed at the centre**

40 FTE (thereof 30 researchers)

**Total costs**

1<sup>st</sup> funding period: EUR 17.15 million (4 years)
2<sup>nd</sup> funding period: EUR 25.44 million (4 years)

**Management of the centre**

Ao.Univ.-Prof. DI Dr. Andreas Wimmer, CEO & Scientific Director

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1 Company and scientific partners with headquarters outside of Austria

The COMET Centre is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMDW as well as co-financing federal provinces. The COMET programme is managed by FFG. >> [www.ffg.at/comet](http://www.ffg.at/comet)

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