Federal Ministry
Republic of Austria
Digital and
Economic Affairs

Federal Ministry
Republic of Austria
Transport, Innovation
and Technology

FFG
Promoting Innovation.

COMET: K-Project

WoodC.A.R.
Wood - Computer Aided Research

Main location	Weiz, Styria
Other locations	Graz / Stryia, Tulln / Lower Austria
Research programme	The area Material Engineering will build the basis for describing mechanical properties of wood-compounds under static and dynamic loads and in crash situations. In the area Virtual Engineering sound material models will be developed, which can be applied in computer aided engineering. Within the area Production Engineering demonstrators will be built on the basis of virtual engineering. Testing will continuously improve the reliability of material models. WoodC.A.R. will open new potentials for wood-based components and compounds with a significant impact on the Austria economic area.

Planned realisation and outcomes

Employing the results will lead to additional innovations, resulting in technologies which make wood available to industrial designers and engineers for engineered wood components and functional engineered wood products and will open additional chances and opportunities for new applications by OEMs. It is aimed to replace metal and plastic components with wood composite structures, use the potential of wood in design and production, optimize products for different applications and etc.

History of establishment	A comprehensive feasibility study was performed to prove that wood can be simulated, even in crash situations. Also positive economic and ecological effects were estimated. The project WoodC.A.R. is significantly based on this study.

Selected company partners

1. Autocluster Steiermark
2. DOKA Industrie GmbH
3. EJOT Austria GmbH & CoKG
4. Forst-Holz-Papier
5. Holzcluster Steiermark GmbH
6. IB Steiner
7. Lean Management Consulting GmbH
8. MAGNA STEYR Fahrzeugtechnik AG & Co KG
9. Mattro Mobility Revolutions GmbH
10. Weitzer Holding GmbH

Selected scientific partners

1.University of Natural Resources and Life Sciences, Vienna
2. Vehicle Research Center, Graz
3. Graz University of Technology, Vehicle Safety Institute
4.Karl-Franzens University of Graz, Institute of Systems Sciences, Innovation and Sustainability Research
5. FH Joanneum Graz, Institute Product & Transportation Design

Selected international partners [1]

1. Collano AG
2. DYNAmore GmbH
3. MAN Truck & Bus AG
4. Volkswagen AG

Start of the K-Project	1.3.2017 (4 years)
Number of personnel	11,5 (FTE) are involved (9,64 FTE are scientists)
Total costs	EUR 5,000,000.00
Leader of consortium:	Energy and Innovation Centre of Weiz (W.E.I.Z.)
Contact:	Mag. (FH) Bernadette Karner Franz-Pichler-Straße 30, A-8160 Weiz +43 (0) 3172 603-1123; bernadette.karner@innovationszentrum-weiz.at www.woodcar.eu

[1] Partners with headquarters outside Austria