Two-Session-Clustering Workshop

03.03.2021 | SESSION 2: Short introduction of QUIET

Presenter:
Dragan ŠIMIĆ

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QUIET - **QU**alifying and **I**mplementing a user-centric designed and **E**fficien**T** electric vehicle

GENERAL INFORMATION

- Topic:
  Electric vehicle user-centric design for optimised energy efficiency
- Topic identifier:
  GV-05-2017
- Type of action:
  RIA Research and Innovation Action
- Project Coordination:
  Dragan SIMIC (AIT Austrian Institute of Technology GmbH)
- Grant agreement number:
  769826
- Project acronym:
  QUIET
- Project total cost and total EU contribution
  6,998,955.00 EUR

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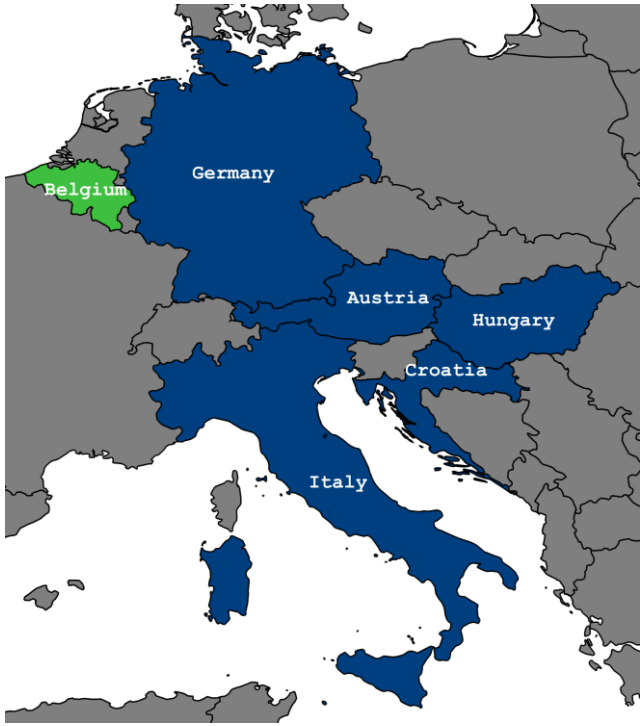
CONSORTIUM PARTNERS

- List of Participants

Participant No*	Participant short name	Participant organisation name	Country
1 Coordinator	**AIT**	AIT Austrian Institute of Technology GmbH	Austria
1a	**AIT/LKR**	LKR Leichtmetallkompetenzzentrum Ranshofen GmbH	Austria
2	**HRE-G**	Honda R&D Europe (Deutschland) GmbH	Germany
3	**AVL**	AVL List GmbH	Austria
4	**QPD**	AVL Thermal & HVAC	Germany
5	**VEN**	VENTREX Automotive GmbH	Austria
6	**UOZ**	University of Zagreb	Croatia
7	**IFAM**	Fraunhofer Institute for Manufacturing Technologies and Advanced Materials IFAM	Germany
8	**ATT**	ATT advanced thermal technologies GmbH	Austria
9	**ECON**	eCon Engineering Kft.	Hungary
10	**RUB**	Rubitherm Technologies GmbH	Germany
11	**STS**	SeatTec Sitztechnik GmbH	Germany
12	**OBR**	Obrist Engineering GmbH	Austria
13	**JRC**	Joint Research Centre - European Commission	Italy



* The same participant numbering as used in the administrative proposal forms.

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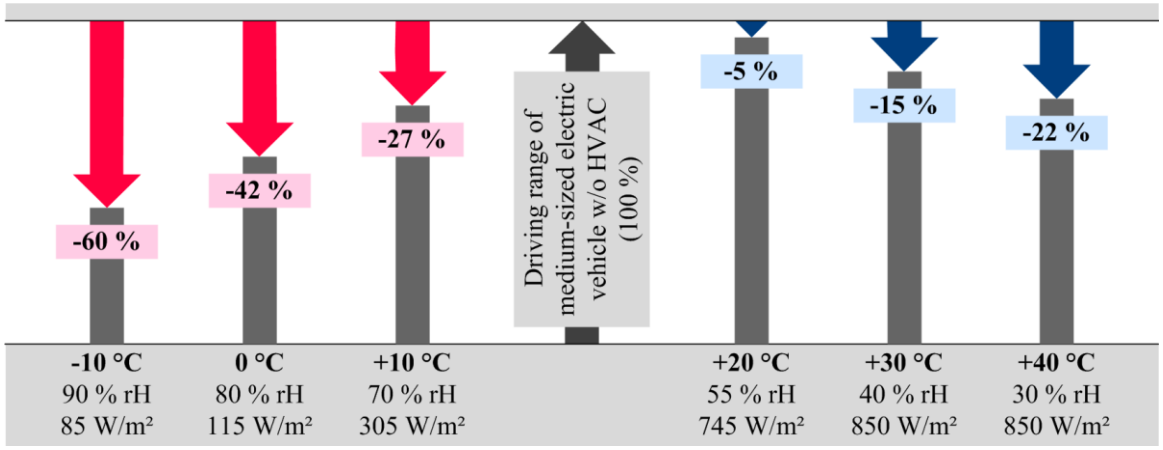
MOTIVATION

- **Limited driving range** of the e-vehicles compared to conventional fuel vehicles
- **High energy consumption** of **auxiliary** components and modules
  - Heating and Air Conditioning systems
  - 60% reduction of driving range in cold weather conditions

- Reduction of global CO_2 emission
- Increase of passenger comfort



Sources: U.S. Department of Energy, "Vehicle Systems 2015 Annual Report", DOE/EE-1304, January 2016, www.vehicles.energy.gov.

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PROJECT AREAS & OBJECTIVES

AREA I
expected **energy** reduction through thermal and energy management
10 %

AREA II
expected **weight** reduction of lightweight vehicle components
20 %

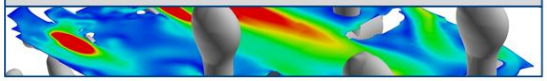
AREA II
expected **weight** reduction of lightweight seats
10 %

vehicle validation platform
(B-segment Honda Fit EV)

AREA II
expected **energy** reduction through thermal insulation
20 %

AREA III
expected **energy** reduction through optimized cabin heating
10 %

AREA III
expected **energy** reduction through novel AC with PCM storage
15 %



AREA II
expected **weight** reduction of lightweight windows
30 %

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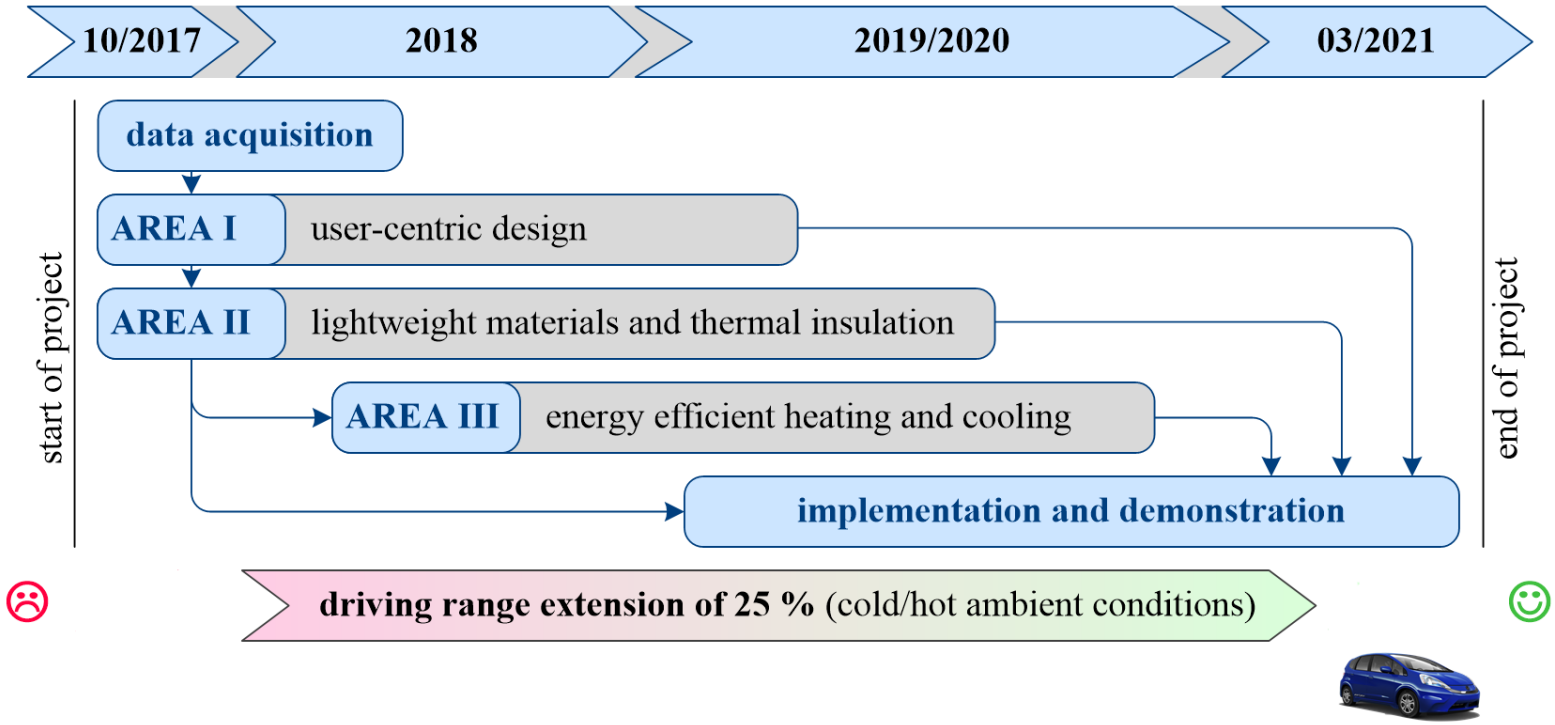
PROJECT TIMELINE



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Get in touch with the QUIET consortium!

www.quiet-project.eu

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