

## INVITATION: Two-Session-Clustering Workshop QUIET & DOMUS

### Session 1

Making electric cars more energy efficient

📅 17<sup>th</sup> February 2021

🌐 Online webinar

🕒 9 am CET

🕒 3.25 hours

### Session 2

Breakthrough technologies at component level

📅 03<sup>rd</sup> March 2021

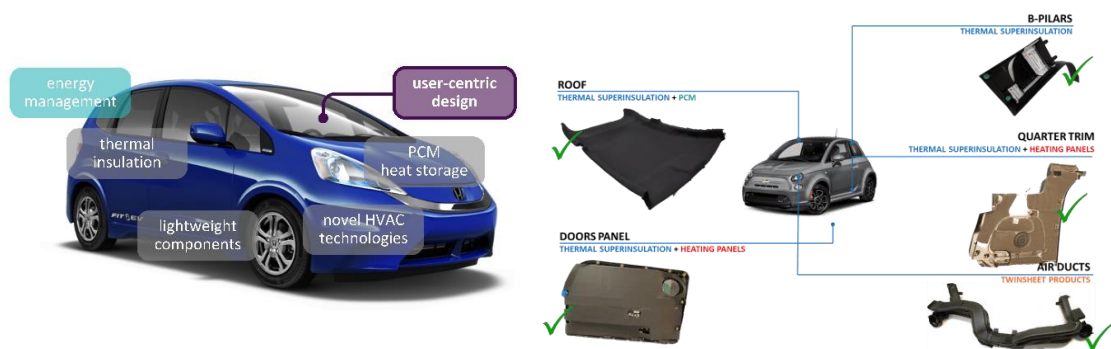
🌐 Online webinar

🕒 9 am CET

🕒 4 hours

Please register for one or both sessions [via this link](#)

## Electric vehicle user-centric design for optimized energy efficiency



Increasing the range of these vehicles will increase customer acceptance and market penetration of EVs in Europe and around the world in the coming years, and hence contributing to clean mobility.

The both Horizon 2020 projects DOMUS (Design OptiMisation for efficient electric vehicles based on a **U**Ser-centric approach, [www.domus-project.eu/](http://www.domus-project.eu/)) and QUIET (**Q**Ualifying and Implementing a user-centric designed and **E**fficien**T** electric vehicle, [www.quiet-project.eu/](http://www.quiet-project.eu/)) aim to optimize energy efficiency and thus to increase the range of electric vehicles via innovative user-centric design. New cabin components, systems and control strategies will be developed and demonstrated in an A and B segment car. Both projects will present their progress and will highlight the similarities and differences in their approach.

## Programme

DOMUS and QUIET have one ultimate goal: Increase driving range of electric vehicles by 25 % in order to increase customer acceptance and market penetration of EVs in Europe and around the world in the coming years. In order to achieve such an important objective both projects are developing:

1. A virtual user-centric approach to design radically new cabin designs and assess them in terms of optimal energy efficiency use
2. Breakthrough technologies at component level (Doors, seats, panels...etc.) that will reduce the weight and energy consumption of the entire electric vehicle
3. Thermal management control system to be implemented in a demo car which will maximize energy efficiency while keeping safety and comfort.

**Session 1** will discuss and analyze the different methodologies applied by both projects in order to fulfil the same objectives.

**Session 2** will discuss breakthrough technologies at component level and discussing with invited speakers from the H2020 projects BIOMOTIVE and FITGEN about alternative solutions at component level related to EVs.

## Moderation & session organizers

### European Commission



**Eric Cerneaz (European Commission – INEA)**

Project Officer DOMUS & QUIET | Moderation of Discussions

### DOMUS



**Maarten Weide (Uniresearch)**

Maarten has a Master's degree in Industrial Design Engineering from the Delft University of Technology. Maarten is an experienced project manager with over 10 years' experience in project management. He has managed many European projects, mainly on the topics Energy and NMP (Nanosciences, nanotechnologies, materials and new production technologies).

Project Manager and Dissemination leader of DOMUS


### QUIET




**Dragan Šimić (AIT)**

Senior Scientist & Thematic Coordinator at AIT. Expert for EV and HEV modelling and simulation (e.g. energy efficiency, thermal management, energy management) and for e-mobility, HVAC systems and automotive applications.

Project Manager & Coordinator of QUIET.


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	<p><b>Clustering Workshop QUIET &amp; DOMUS (Online)</b></p> <p>17<sup>th</sup> February 2021</p>
<p><b>Meeting organiser</b></p>	<p><b>Uniresearch BV</b></p>
<p><b>Type of meeting</b></p>	<p>Workshop, Session 1</p>
<p><b>Meeting Link</b></p>	<p>MS Teams, link will be provided after registration</p>

17 <sup>th</sup> February 2021		
Timing	Topic	Presenter
9:00-9:05	Welcome / Introduction to the workshop	Coordinator QUIET & DOMUS
9:05-9:10	Short introduction of QUIET	Coordinator QUIET
9:10-9:15	Short introduction of DOMUS	Coordinator DOMUS
9:15-9:40	A virtual user-centric approach to design radically new cabin designs and assess them in terms of optimal energy efficiency use	DOMUS, Sebastian Moller, Virtual Vehicle, with contribution from James Brusey, Coventry University
9:40-10:05	A virtual user-centric approach to design radically new cabin designs and assess them in terms of optimal energy efficiency use	QUIET, Steffen Jahn; User Centric Design, Honda R&D Europe (Deutschland) GmbH)
10:05 -10:30	Discussion	Moderated by Eric Cerneaz, EC Project Officer
10.30-10.45	Break	
10:45-11:10	Thermal management control system to be implemented in a demo car which will maximize energy efficiency while keeping safety and comfort.	DOMUS, Joaquim Quitart, Thermal management control system, IDIADA; Domenico Vitali, HVAC and HMI, DNTS

**17<sup>th</sup> February 2021**

11:10-11:45	Thermal management control system to be implemented in a demo car which will maximize energy efficiency while keeping safety and comfort.	QUIET, Bernd Thieringer; HVAC system, AVL Thermal and HVAC GmbH
11:45-12:10	Discussion	Moderated by Eric Cernez, EC Project Officer
12:10-12:15	Closure	Coordinator DOMUS & QUIET

	<p><b>(Online) Clustering Workshop</b>  <b>QUIET &amp; DOMUS:</b>  <b>Breakthrough technologies at</b>  <b>component level</b></p> <p>3<sup>rd</sup> March 2021</p>
<p><b>Meeting organiser</b></p>	<p><b>Uniresearch BV</b></p>
<p><b>Type of meeting</b></p>	<p>Workshop, Session 2</p>
<p><b>Meeting link</b></p>	<p>MS Teams, link will be provided after registration</p>

3rd March 2021		
Timing	Topic	Presenter
9:00-9:05	Welcome / Introduction to the workshop	Coordinator QUIET & DOMUS
9:05-9:10	Short introduction of QUIET	Coordinator QUIET
9:10-9:15	Short introduction of DOMUS	Coordinator DOMUS
9:15-9:25	Seats that will reduce the weight and energy consumption of the entire electric vehicle	QUIET, Jürgen Roither, AIT
9:25-9:35	Seats that will reduce the weight and energy consumption of the entire electric vehicle	DOMUS, Ekrem Kececi, Faurecia Seats
9:35-9:45	Discussion	Mod. by Eric Cerneaz, EC Project Officer
9:45-9:55	Thermal insulation solutions / body panels (including PCMs)	DOMUS, Helder-Filipe De Campos Garcia / Cédric Huillet, Hutchinson
9:55-10:05	Advanced thermal storages based on phase change materials (PCM) with high power output using open porous aluminum foams	QUIET, Esther Kieseritzky, Rubitherm

3rd March 2021		
10:05-10:15	Discussion	Mod. by Eric Cerneaz, EC Project Officer
10:15-10:25	Powerfilms for infrared radiative heating	QUIET, Daniel Habenbacher, ATT
10:25-10:35	Interior radiant panels	DOMUS, Michael Oik, IEE
10:35-10:45	Discussion	Mod. by Eric Cerneaz, EC Project Officer
10:45-11:00	Break	
11:00-11:10	Lightweight materials with composites and novel hybrid foam materials to reduce the weight of EV closure elements/doors while improving their thermal properties	QUIET, Tamás Turcsán ECON
11:10-11:20	Dashboard weight reduction	DOMUS, Faurecia Interior
11:20-11:30	Discussion	Mod. by Eric Cerneaz, EC Project Officer
11:30-11:40	Lightweight thermoplastic glazing techniques for windows	QUIET, Hansjörg Kapeller, AIT
11:40-11:50	Glazing insulation / solution + - Permanent anti-fog windshield coating for enhanced driver vision	DOMUS, Rolf Gervelmeyer, AGC + Jean Di Martino, LIST
11:50-12:00	Discussion	Mod. by Eric Cerneaz, EC Project Officer
12:00-12:15	BIOMOTIVE: development of biobased automotive interior parts with enhanced technical performance, improved environmental profile and economic competitiveness	BIOMOTIVE
12:15-12:30	The H2020 project FITGEN: towards delivering a functionally integrated e-axle ready for mass market third generation electric vehicles.	EXTERNAL SPEAKER, Michele De Gennaro, (AIT)
12:30-12:45	Discussion	Mod. by Eric Cerneaz, EC Project Officer
12:45-13:00	Closure	Coordinator DOMUS & QUIET