



Advanced technologies for intelligent urban electric vehicles URBIVEL

"Project co-financed by the European Regional Development Fund through Competitiveness Operational Program 2014-2020"

COMPETITIVENESS OPERATIONAL PROGRAM 2014-2020

PRIORITY AXIS 1 - RESEARCH, TECHNOLOGICAL DEVELOPMENT
AND INNOVATION (RDI) IN SUPPORT OF ECONOMIC
COMPETITIVENESS AND BUSINESS DEVELOPMENT

ACTION 1.2.3

Project type - PARTNERSHIPS FOR KNOWLEDGE TRANSFER



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Main goal

The main goal of the project is to strengthen and diversify the interaction of the Technical University of Cluj-Napoca with the business, regional and national environment in a strategic field at national and European level, Intelligent, Ecological and Integrated Transport, by capitalizing on the potential of RDI infrastructures developed / upgraded to TUC-N in the period 2007-2013

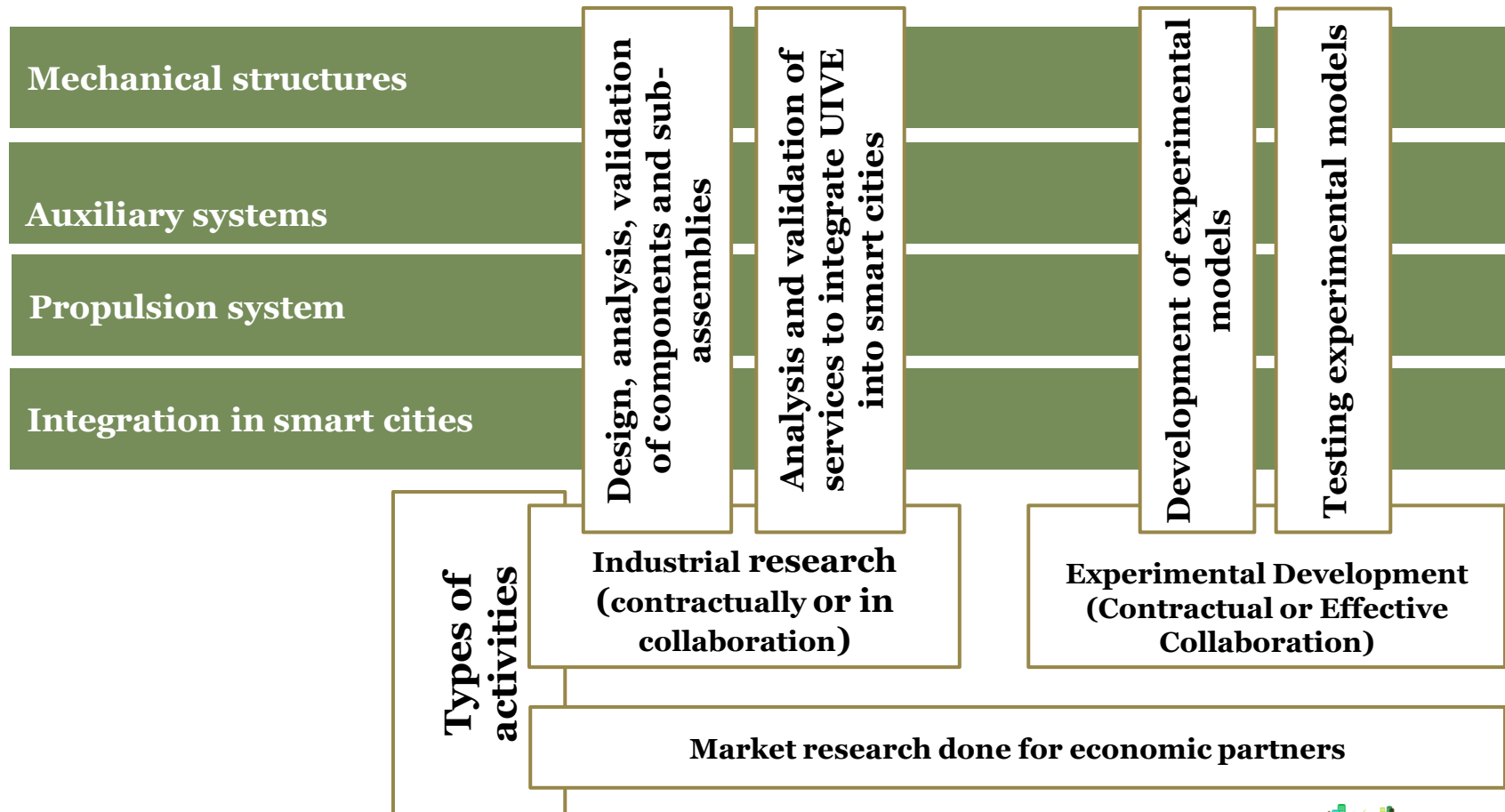
Specific Goals

- ❑ Developing the UTCN-Transport SCI platform and assessing the RDI potential and transferring knowledge / technology transfer at its level. The UTCN-Transport Platform will unify/link the activities of the University's research groups with Intelligent, Organic and Integrated Transport concerns. The unification of their research capability under the umbrella of the same platform as well as the pooling of individual and group efforts and initiatives to develop a common vision, will contribute to increasing the efficiency of RDI activity and its better coordination by facilitating and stimulating engagement in research activities for/in inter-, multi- and transdisciplinary collaboration with actors of the economic environment.
- ❑ Identifying potential partners/beneficiaries and their needs in terms of transfer of knowledge/technology transfer, as well as in developing new partnerships for collaborative research activities. Linking TUC-N-Transport's SCI to the needs of the business environment is a key element in achieving the overall goal.
- ❑ To develop, in partnership with/for the business environment, R&D activities to develop advanced technologies for intelligent urban electric vehicles, contributing to increasing the economic competitiveness of partners/ beneficiaries in the economic environment, as well as to establishing relationships of long-term collaboration. Moreover, the technologies developed within URBIVEL are intended to be used/implemented in the development of ultra-light vehicles for urban transport and for the implementation of autonomous electric propulsion systems in urban transport.



Research directions

- DC1. Scalability and modularity in the analysis, development and testing of propulsion systems and auxiliary systems with low noise and high energy efficiency for UIVE;**
- DC2. Advanced materials for subassemblies and components of UIVE;**
- DC3. Communication systems for integrating UIVE into smart city infrastructure**





Financing Methods

For the execution of the industrial research and experimental development activities, respectively the carrying out of market studies, the research organization may conclude one or more subsidiary contracts with an enterprise of the following types:

- 1. "minimis" type contract - of max. 800,000 lei eligible amount;**
- 2. "State aid" type contract - of max. 1,800,000 lei eligible amount.**

13 - Subsidiary Contracts (SC)



SC	Title	Partner
SC1	Development of advanced electrical drives for automotive auxiliaries	Tehnologistics SRL
SC2	The development using the multiphysical analysis methods of high energy efficient electric cars designed for lightweight propulsion systems.	ICPE SA
SC3	Cloud service development for integration of electric vehicles into smart cities	SC Net Brinel SA
SC4	HIL testing platform for power sources integration on the vehicle	SISW Romania SRL
SC5	Developing a new bogie typology using composite materials; developing a new propulsion system for a suburban electric branch	SC Remarul 16 Februarie SA
SC6	Experimental development of a high-efficiency power source for an electric bus' powertrain propulsion group	SC Porsche Engineering România SRL
SC7	Designing the mechanical structure of a two-seater urban electric car using composite materials	SC BELCO AVIA
SC8	R&D and innovation service provision for the enterprise by the research organization	SC BELCO AVIA
SC9	Multiphysical development and analysis of high efficiency electric machines with direct application in ventilation, heating and air conditioning systems for the automotive industry through specific partnership activities for the transfer of knowledge	ICPE-IE
SC12	Tip proiect: Parteneriat pentru transfer de cunoștințe pentru activități din categoria C	INOVO FINANCE S.R.L.
SC13	Dezvoltarea unei platforme fizice mobile de cercetare-inovare a automobilelor electrice	INOVO FINANCE S.R.L.



PERFORMANCE INDICATORS after 4 years of implementation



	Performance indicators		Approved value/reviewed	Value of obtained indicator until 31.08.2020
1	Number of supported companies – CO01	No	0 / 7	10
2	companies cooperating with research institutions - CO26– CO26	No	0 / 7	10
3	Patent applications resulting from the project- 3S7 (number)	No	5 / 5	10/7 accepted
4	Private investment combined with public support for innovation or development projects C&D – CO27 (Euro) ¹	Ron/ Euro	2.446.875 RON / 555.060,91 Euro ²	2.028.856,09/ 435.769,60 Euro ³

For more information visit urbivel.utcluj.ro

