

Department: Mechanical Engineering

Group Name: Applied Thermodynamics, Energy and Construction

Acronym: GI-TENECO / TENECO Research Group

Group Coordinator: López González, Luis María

ANEP Area(s): Mechanical, naval and aeronautical engineering; Civil engineering and architecture

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RESEARCH TEAM	Number of researchers: 10	
Researcher	Department	Professional category
López González, Luis María	Mechanical Engineering	FP
García Lozano, César	Mechanical Engineering	Interim Contract
Gómez Chomón, José Carlos	Mechanical Engineering	Associate
Iñarrea Las Heras, Ignacio	Modern Philologies	FP
Las Heras Casas, Jesus	Mechanical Engineering	Associate
López Ochoa, Luis María	Mechanical Engineering	ТР
Mendívil Giro, Manuel Antonio	Mechanical Engineering	Associate
Olasolo Alonso, Pablo	Mechanical Engineering	Associate
San Vicente Navarro, Alejandro	Mechanical Engineering	Associate
Vicuña Martínez, Javier Esteban	Electrical Engineering	Collaborator

COLLABORATORS Collaborators № of collaborators: 0 <u>Department</u>

Professional category





Lines of research

Planning, modelling, optimisation and energy management.

Energy and environmental ratings for housing (CEMV).

Innovation in the development and application of the Technical Building Code (TBC) in the field of its basic documents HE, HS, SI and others.

Development of innovative applications of renewable energies in the energy, industry and building sectors, in particular.

Solving complex problems in Engineering and Architecture by applying the latest generation of mathematical and computer tools.

Optimisation of electricity generation systems with renewable energies and hybridisation.

Innovation in health and safety at work, including integrated management.

High-level re-engineering and solution optimisation.

Phase change materials and their applications.

Scientific and technological offer

Inventories and energy plans.

Energy, environmental and technological audits.

Innovative technological developments of the TBC in its various fields (HE, HS, SI and others).

Innovative developments of renewable energy applications in industry and building, especially with biomass (solid, liquid and/or gaseous).

Development of new methodologies in health and safety at work.

Proposals for alternative solutions to the current TBC in its various aspects (HE, HS, SI, among others).

High-level development and optimisation of products, equipment, sets, systems, installations and applications in the fields of Engineering and Architecture.

Development and optimisation of electricity production from renewable sources, with specific physical and mathematical algorithms to improve performance, sustainability, operation, maintenance and life cycle.

Intelligent networks. Distributed Generation. Polygeneration. District Heating and Cooling.

Development and optimisation of technological alternatives for intelligent, sustainable and integrating growth from the innovative vision of energy and construction.

Sustainable mobility and responsible transport.

Valuation of natural resources, products and by-products.

Special developments for electric power generation with renewable sources (biomass, wind, solar). Hybrid systems.





National and international relations

University of the Basque Country (UPV/EHU). Department of Thermal Engines and Machines. Polytechnic University of Valencia (UPV). Department of Thermal Engines and Machines. University of Vigo. Department of Mechanical Engineering, Machines and Thermal Engines and Fluids. University of Castilla- La Mancha. Department of Thermal Engines and Machines. Public University of Navarra. Thermal Engines and Machines Area. University of Zaragoza. Department of Thermal Engines and Machines. University of Seville. Department of Thermal Engines and Machines. University of Valladolid. Department of Thermal Engines and Machines. University of León. Thermal Engines and Machines Area. University of Oviedo. Department of Energy. Department of Thermal Engines and Machines (Gijón). Polytechnic University of Catalonia. Thermal Engines and Machines Area. Polytechnic University of Cartagena. Thermal Engines and Machines Area. Rovira i Virgili University. Department of Thermal Engines and Machines. University of Burgos. Thermal Engines and Machines Area. Polytechnic University of Madrid. Department of Thermal Engines and Machines. University of Deusto. Department of Computer Science and Applied Mathematics. CIRCE (Centro de Investigación de Recursos y Consumos Energéticos). Zaragoza, Aragón. EVE (Basque Energy Entity). Basque Government. CIDAUT (Foundation for Automotive Research and Development). Government of Castilla-León. INEGA (Galician Energy Institute). Government of Galicia. EREN (Regional Energy Body). Government of Castilla-León. AGECAM (Castilla-La Mancha Energy Agency). Government of Castilla-La Mancha. IDAE (Institute for Energy Diversification and Saving). Ministry of Industry, Energy and Tourism. Government of Spain. National University of La Rioja (Argentina). Federal University of Pernambuco (Brazil).

Institut Supérieur Aquitain du Bâtiment et des Travaux Publics (France).

