

INSTITUTO TECNOLÓGICO DE GALICIA

Researching:

Energy



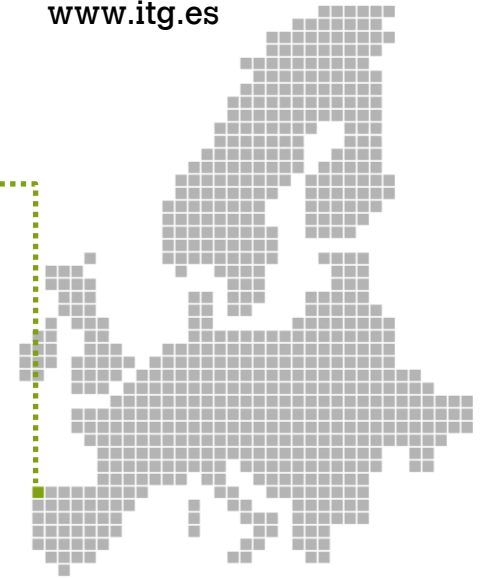
Who We Are

Instituto Tecnológico de Galicia | ITG

TECHNOLOGY CENTRE located in Galicia, Spain

[No. 115 Spanish Ministry of Economy & Competitiveness Register]

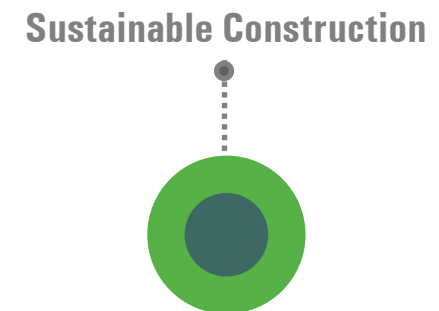
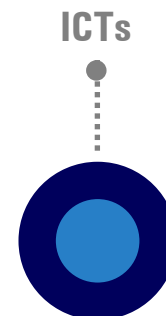
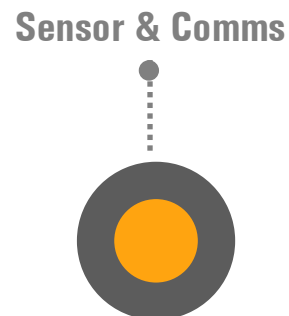
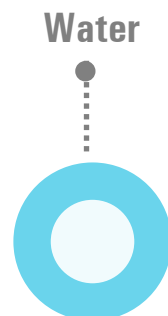
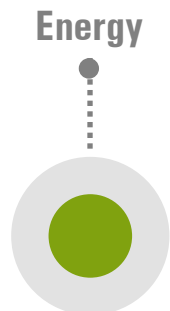
PRIVATE NON-PROFIT FOUNDATION set up in 1991



BOARD OF TRUSTEES: Architects, Civil Engineers and Industrial Engineers Galician Associations, Mining Engineers' Assoc., Galician Agronomic Engineers' Council, Naval and Oceanic Engineers' Assoc.; Galician Businessmen Confederation, and Universities of A Coruña, Vigo and Santiago de Compostela

Certification in UNE-EN ISO 9001 standard (Quality Management System) and in UNE 166002 standard (R&D&I management system)

At ITG we are organised in **5 INTERCONNECTED KNOWLEDGE AREAS:**



Research & Development Activities on Energy

Building Energy Simulation

Through Design Builder, a specific building energy simulation software tool, ITG has extensive experience and background in:

- Assessing the effectiveness and optimization of heating, ventilation and air-conditioning (HVAC) design alternatives
- Comfort analysis
- Characterization of thermal envelope
- CO₂ emissions calculation from operation of building facilities
- Natural lighting studies

ICTs for Energy

ITG develops energy information systems and software engineering for efficient processing, data modeling, monitoring and exploitation by designing business rules, development of business intelligence layer and user interface; primarily using Web oriented architectures in combination with Open-Source technologies.

These systems display overall energy installation status in order to facilitate analysis and decision making of building managers.

Energy Generation Technologies

Energy Consulting is an important activity of ITG, which lets the entity supply energetic solutions based on renewable energies appropriate for specific conditions and requirements:

- Analysis, detection and characterization of energy generation technologies (microCHP and renewable)
 - Test energy generation technologies
 - Software development for managing and operation of Smart Grid Systems
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Zero Emission Buildings

ITG has important knowledge in systems for designing Nearly Zero Energy Buildings (NZEB) and Zero Energy Buildings (ZEB) and energy information tools associated.

In addition, it is important to highlight that ITG, in the field of sustainable construction, has been designated by BRE Global Ltd. (UK) to adapt, manage and lead BREEAM in Spain, the world's leading design and assessment method for sustainable buildings.

Energy Efficiency Audits

From 2005, ITG has developed more than 300 Energy Efficiency Audits in different sectors: industry, construction, water and marine (fishing vessels).

- Direct measurement with high technical equipments
- Energy savings' identification and evaluation
- Analysis of each one specific conditions

Technical Publications in Energy

Sectorial Study in Energy Efficiency of Galician Hotels

Sectorial Study in Energy Efficiency of Galician Rural Hotels

Energy Efficiency Manual for Fisheries

Sectorial Study in Energy Efficiency of Galician Fisheries

Guide for Saving Energy and Energy Efficiency in Services Sector

Best Guidelines for Building Refurbishment

Methodology Guidelines for Buildings' Energy Refurbishment

Enhancement Energy Study in Timber Sector

Enhancement Energy Study in Textile Sector

Best Practice Guidelines: Energy Efficiency Model in SMEs

ITG International R&D Projects

Since 1996, ITG has developed **international cooperation projects** with important public and private entities.

ENTIC Project – Smart & Sustainable Energy Management for improving the competitiveness of SMEs in the Euroregion

www.entic.eu

GE2C'S Project – Efficiency, CHP and Energy Management in Service Sector

www.ge2cs.com

E4R Project – Building Energy Efficiency Assessment Tools. Refurbishment in SUDOE Territory

www.e4rproject.eu

GENER Project – SMEs' Accompaniment in Efficient Models for Energy Management Implementation

www.proyctogener.org

ASAP Project – Actions for Systemic Aquifer Protection

www.klink.it/gate/asap

WIZ Project, WaterIze Spatial Planning: encompass future drinkwater management to climate change

www.wiz-life.eu

ROEM + Project – High resolution AppROach for ManagEMent of Surface Water EutroPhication in Rural areas of the Duero River Basin

www.roemplus-life.eu

WETNET Project – Innovative in-pipe hot-tap insertion flow sensor plus smart NETWORKS enable ecowise pervasive monitoring of water distribution grids

www.wetnet.it

SANePLAN Project – Integrated Planning and Sustainable Management of Sanitation Infrastructures through Innovative Precision Technology

www.saneplan-life.eu

INCOPYME NETWORK Project – Cooperation between Centres and Research and Innovation SMEs improving competitiveness in the Euroregion

www.redincopyme.org

e-MEDI@TE Project

www.emediate-justice.eu

How to Contact Us

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