

# IrRADIARE

Science for evolution®



# COMPANY PROFILE



IrRADIARE, Science for Evolution®

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## ABOUT US

IrRADIARE was founded in 1995 as a spin-off of the Technical University of Lisbon.

Three stages defined our journey: development, innovation and integration.

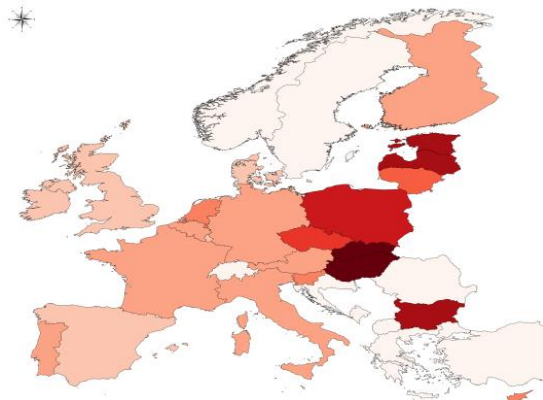
In a first phase, modelling, technology and optimisation solutions were developed.

Those predominantly serve energy intensive sectors.

Subsequently, innovative systems opened new responses to diversified challenges.

Urban management, energy costs reduction, process safety optimisation, environment protection were among target sectors.

Currently, integrated approaches are deployed to support new visions on smart development, sustainability, competitiveness and quality of life .



Energy intensity in tertiary sector in 2020.

In <http://observatory.irradiare.com>

## VALUE

IrRADIARE's added-value is related to the following strengths:

To be able to commit to advanced objectives, initiatives and projects;

To offer an extensive platform for innovative ideas to thrive;

To provide comprehensive territorial coverage and multi-sectorial approach;

To combine project management skills with technology and engineering capabilities;

To base its business model on an extensive European and international experience;

To bind high profile expertise to cost efficient solutions and interventions;

To deliver initiative and leadership to partners and clients;

To supply knowledge-based solutions;

To ensure effectiveness of investments;

To deliver break-through solutions to public authorities or private investors.

Project management capabilities emerged from almost 2 decades , 20 international projects, 200 interventions, of IrRADIARE's activity at local, regional, national or European level.



## OFFER

IrRADIARE advises on new investments, public-private cooperation and regional public policies. Its widely tested expertise on energy systems modelling ranges from industrial process to city scale.

IrRADIARE's predictive systems are currently supporting advanced business models related to investment in smart development, new energy solutions, energy efficiency, energy use in transport and renewable energy sources.

Advanced model-based solutions to assess, improve and integrate assets in have been delivered in Europe as well as in the US, Brasil and South Korea. Solar thermal, PV, wind, hydric, biomass and biofuels, electric mobility, smart development,

industrial process optimization and energy performance contracting are active areas. Modelling capabilities proved being a key tool in optimizing existing assets and new investments' profitability, integration and monitoring.



Assisting communities in addressing the market barriers and promoting best practices, attracting innovation, investment, jobs creation has been a key interest area. On those areas, IrRADIARE is active from Brussels, Lisbon and Warsaw among other partners' locations.

## SMART DEVELOPMENT

Smart development, sustainability, energy efficiency, renewable energy are on IrRADIARE's list of priorities as well as applied **innovation**, social innovation better **planning**, higher **energy efficiency**, finding better **transport** solutions and the intelligent use of Information and Communication Technologies.

For regional or governmental bodies, strategy consulting has been provided as well as, strategy, management and technology consulting and energy services namely as part of programmes aimed at unlocking local renewable energy markets potential.

For industry, market and socio-economic analysis, funding advice strategy, corporate and management consultancy, auditing, communication and design, modelling, software technological consultancy services and dedicated modelling or software solutions are ready to support new projects implementation and innovative technology deployment.

As far as intelligent energy management and smart systems is concerned,



IrRADIARE's energy management platform currently encompasses 9000 Buildings; 140 municipalities; 3000 Vehicles; 140k Streetlamps; managed energy consumption of more than 200 GWh/year; around 0.5 million of electronic invoice corresponding to 27,5M€/year. Plus, 8M€ of gathered funds for social support and economy related investments.

Last year, IrRADIARE delivered planning, engineering and funding solutions in the following areas:

- Sustainable Domestic Consumption;
- Transport and Mobility;
- Smart development;
- Education Infrastructures;
- Sports Infrastructures;
- Public Infrastructures;
- Social innovation;
- Social Housing;
- Social Care Infrastructures;
- Business Sector;
- Urban Management;
- Distributed renewables;
- Intelligent management.





## OTHER INTEREST AREAS

Several areas benefit from our integrated approach, among those: environment, innovation, competitiveness, social innovation (among other topics on social economy), empowerment and climate, urbanism and territory.

Investments in hybrid and small energy distributed generation, smart systems, sustainable mobility, dynamic tariffing and optimized management, climate adaptation and resilience have been assessed and planned, namely under European **Covenant of Mayors'** and **Mayors Adapt**'scope, allowing an holistic approach under which different but complementary views and approaches are combined.



## CAPABILITIES

IrRADIARE operates as an integrated competence platform on which basis the following capabilities have been deployed to generate value to partners and costumers:

**modelling, technology consultancy, communication and design environment management, process and data analysis, auditing, strategy consulting, funding advice, project management, market analysis, corporate consultancy, territorial analysis, energy services, management consultancy, GIS-based analysis, interoperability, Backend and frontend Software development.**

## FUNDING

Currently, IrRADIARE is involved in managing, planning, designing or engineering projects reaching far more than **400M€ of mobilized resources**.

These projects aim at reducing energy costs mainly by focusing on energy efficiency in public buildings and social housing, renewable generation of heating and power, efficient vehicles alternative fuels both involving public and private funding, namely energy service sources.

IrRADIARE's approach proactively engages with the relevant authorities and stakeholders from earlier process stages, adding value, impact and effectiveness to solutions and results.

## SECTORS

On the following sectors, IrRADIARE operates as intelligence, knowledge, service or solution provider or, when applicable, as promoter, in setting-up intelligent energy solutions:

**Municipalities**

**Regional authorities**

**Government bodies**

**Education and empowerment**



**Industry**

**Technology providers**

**Agriculture**

**Tourism**

**Creative industries**

**Aeronautics**

**Environment**

**Renewable energy**

**Urban and territorial management**

**Assets and resources management**





## IMPLEMENTATION

Operating over the full project implementation chain – from concept to funding – IrRADIARE offers cooperation, advice, intelligence and assessment on public policy measures or private investments.

Open cooperation with local and regional stakeholders is critical to succeed in providing both regional authorities and private investors with substantial breakthroughs and opportunities.

IrRADIARE's approach favours local clusters to develop, new activities to emerge and economy to grow.

Thus, IrRADIARE is open and willing to establish cooperation with regional and to bridge the gaps in accessing

innovation, funding and success., namely through:

**Setting-up energy sustainability plans on basis of advanced cost/benefit assessment;**

**Establishing empowerment networks, e-learning, business creativity labs, web-market-places and collaborative platforms;**

**Developing project hallmarks, assessments and references for funding and investment clearance;**

**Road-mapping relevant funding opportunities, namely under upcoming 2014-2020 under sound foresight, modelling and evaluation;**

**Implementation monitoring on the basis of our energy intelligent management platform.**



## **MEASURES**

Currently, under this approach, local energy sustainability measures as follows are under implementation on the following areas:

**Efficient lighting**

**Intelligent street lighting**

**Housing energy certification**

**Efficient vehicles, parts and fleets**

**Electric vehicles**

**Transport network improvements**

**Modernisation and retrofitting**

**Active monitoring (direct effect)**

**LED and innovative lighting systems**

**Solar energy**

**Heat pumps**

**Biomass heating and hot water**

**Efficient boilers**

**Biodiesel**

**Urban rehabilitation and  
accessibilities improvement**

**Water management**

**Urban supply fleets**

**Office equipment renovation**

**Natural gas consumption expansion**

**Domestic applications renewal**

**Public awareness, education,  
awards**

**Energy management in  
condominiums**

**Voluntary carbon reduction  
programmes**

**Cycling and walking**

**Industry and business efficient  
mobility**

**Large events mobility optimisation**

**Public procurement (green  
procurement)**

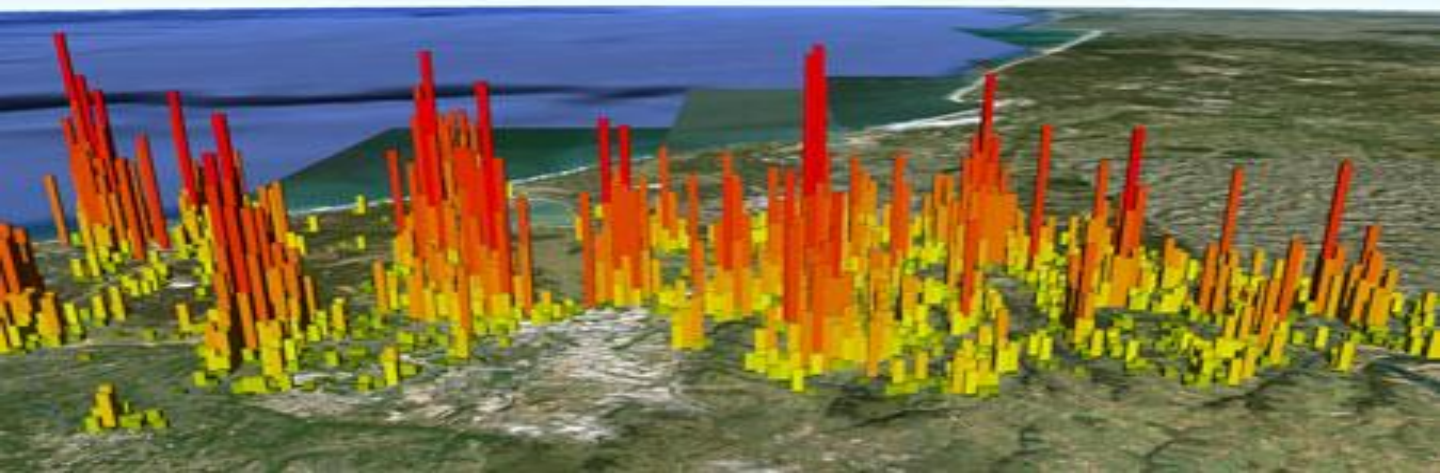
**Urban planning**

**Support mechanism for green  
industries**

**Professional performance  
improvement**







## EUROPEAN NATURE

Since its earliest times, IrRADIARE has operated as a truly European company. Bridges have been built among partners through Europe and successful concepts and projects have been launched and implemented namely under the following programmes scope:

**COST**

**FPS**

**INTERREG**

**LIFE**

**URBACT**

**LEONARDO**

**TEMPUS**

**EURATOM**

**JOULE**

**SPRINT**

**IEE - Intelligent Energy Europe**

## INNOVATION

Recent applications for smart cities and communities have demonstrated our integrated approach effectiveness at municipal and regional level. Dedicated open business models are proposed to develop successful new public-private cooperation programs and foster innovative entrepreneurial ventures responding to sustainable energy challenges. IrRADIARE's solutions have proved to be powerful tools for both entrepreneurial investors and public authorities in reaching higher profitability and economic growth.

## CONTRACTING

IrRADIARE operates as intelligence, knowledge, service or solution provider or, when applicable, as promoter.



## TEAM

Professionalism, teamwork and communication are key words that help us every day. Perseverance and strong partnerships give us strength to proceed, working, more and better!

For us, it is as important to *keep doing the job as* to find the tools to improve it, everyday.

## GLOBAL NETWORK



IrRADIARE shares a global vision with its customers and partners. Creativity, technology, innovation, initiative, efficiency, integration are the pillars that support the vision

Partners in **21 European Union member states** and in 15 other countries have consolidated a global culture that we carry for each new intervention.

## LANGUAGES

IrRADIARE's team currently operates in the following languages:

English  
Portuguese  
French

Spanish  
Polish  
Catalan  
Lithuanian



**IrRADIARE**  
Science for Evolution

**BRUSSELS – LISBON - WARSAW**

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