

Message from the Chairman

It is an honor for me to present the Orkestra-Basque Institute of Competitiveness 2011 Annual Activity Report. The Institute is based on expertise, quality, and an interest in contributing reflections on the economy that facilitate decision-making.

Upon accepting the proposal from the Deusto Foundation to preside over Orkestra, I was aware that the Institute's accomplishments are fundamentally the result of the constant efforts of its former Chairman, José Luis Larrea. His merit and the merit of everyone involved in the project have been huge.

The work that Orkestra carries out in the fields of investigation, interaction, and instruction may be one of the instruments that help locate the factors that are contributing to the deep economic crisis we are experiencing.

This is because, from the frontier of knowledge and in order to contribute to Basque society's competitive transformation, the aforementioned work provides elements, particularly to policy makers, for decision-making and for evaluating the outcomes of these decisions.

Furthermore, the Institute performs the function of connecting agents and factors that have a bearing on competitiveness, thereby

contributing to building a valuable network that, as is indicated in this annual report, unites efforts, determination, and initiatives, projecting them to the future.

This work would not be possible without the help of the firms and public entities that have supported this project from the beginning and that —even in the complicated economic situation we are going through— continue to make significant efforts to maintain this support.

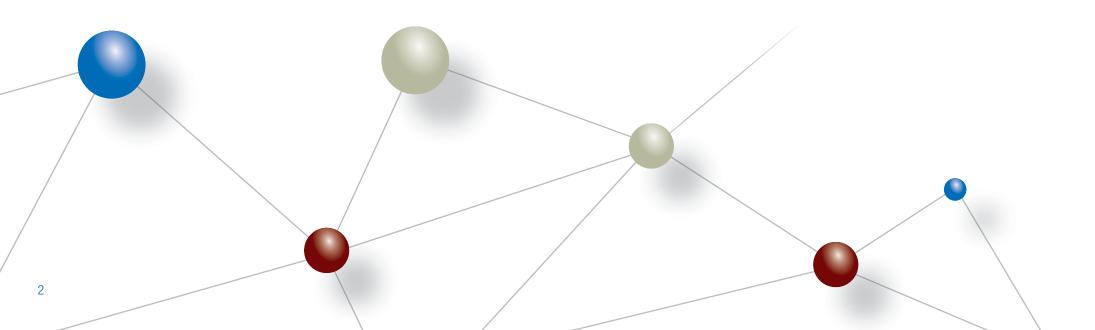
On behalf of Orkestra, our deepest gratitude is offered to all of them.

We would like to extend this gratitude to all the entities and people who collaborated with Orkestra throughout the year and to everyone who makes up the Institute's work force and makes its daily work possible.

The achievements in this annual report could not have been possible without them.



Ignacio Mª Echeberria
Chairman
Basque Institute of Competitiveness
Deusto Foundation



Message from the General Manager

2011 was a particularly significant year for the consolidation of Orkestra-Basque Institute of Competitiveness. Throughout the year, the Institute focused its efforts on the two most important undertakings of the 2012-2013 Strategic Plan: consolidating Orkestra as an international benchmark for analysis of and debate on territorial competitiveness in a global environment, and making the Institute a major player in improving the Basque Country's sustainable competitiveness and thus a player that brings about a fast and favorable end to the crisis. This annual report gives an account of some of the results of both undertakings.

We were chosen, together with the Basque Government, to organize the 15th TCI Annual Global Conference, which will be held in October 2012. The Basque Country was chosen from seven candidates to organize this international conference, which will bring the most important global network of professionals and researchers together to reflect and work on the theory and practice of economic development of countries and regions. Academics, national and regional development agencies, cluster associations, academic institutions, and companies —among others— from all over the world will come together in the Basque Country.

The celebration of *Competitiveness Day* in the month of July was no less important. It was an intense day of work, with multiple parallel sessions dedicated to the diverse factors that affect competitiveness. It served as the framework for presenting the *Basque Country Competitiveness Report 2011: Leading the New Complexity.* Over 600 representatives from the Basque Country's economic, business, financial, and institutional framework took part in the conference. The 2011 *Competitiveness Report*—the third one prepared by Orkestra since its creation—measures and puts into perspective the Basque Country's competitiveness in the context of Spain's and Europe's regions. The report also reflects deeply on the pillars that the future development of the Basque Country's economy and society should be based on if—in the context of the emerging *new complexity* stemming from technical change and globalization processes—it aims to exercise the necessary leadership to ensure the wellbeing of its citizens.

The Institute continued to develop the course of action of policy evaluation begun the year before. Monitoring and evaluating the Basque Government's 2010-2013 Business Competitiveness Plan, is a highlight in this area. Worth mentioning is also designing and teaching

training programs for evaluating policies and programs. In 2011 the *Crecer+ Platform* was consolidated as an invaluable instrument for the challenge, shared by society as a whole, of promoting entrepreneurship that has the potential to transform and bring together intelligent human and financial resources for innovative projects. A significant network of *business angels* has begun to be consolidated in the region and to actively invest in entrepreneurial initiatives with high growth potential.

Other milestones this year include the boost to the Strategy Department and the consolidation of the Energy Department's activities. In September, the Head of the Strategy Department joined Orkestra. His arrival, as well as the incorporation of new researchers, has given a new boost to the department, which is reflected in project planning for 2012 in which the company becomes a center of reference. Also outstanding was the process of incorporating researchers into the Energy Department. This has allowed the department to carry out intense research work in 2011 and to encourage significant debate and reflection on energy policy and the energy/competitiveness binomial.

The Institute's educational activities materialized not only in numerous training programs for the Basque Country's various innovation and competitiveness agents but also in the teaching of the ninth *Microeconomics of Competitiveness* course, in the successful launch of the first *Energy and Competitiveness: Gas, Networks and Renewable Energy* course, and in active participation in the Deusto Business School (DBS) Bachelor's, Master's, and Doctoral programs. Particularly relevant is the responsibility taken on by the Institute in the doctoral program on *Business Competitiveness and Economic Development*. Orkestra takes in some of this doctorate program's candidates as researchers, in a process of invaluable mutual collaboration and enrichment.





José Luis Curbelo

General Manager

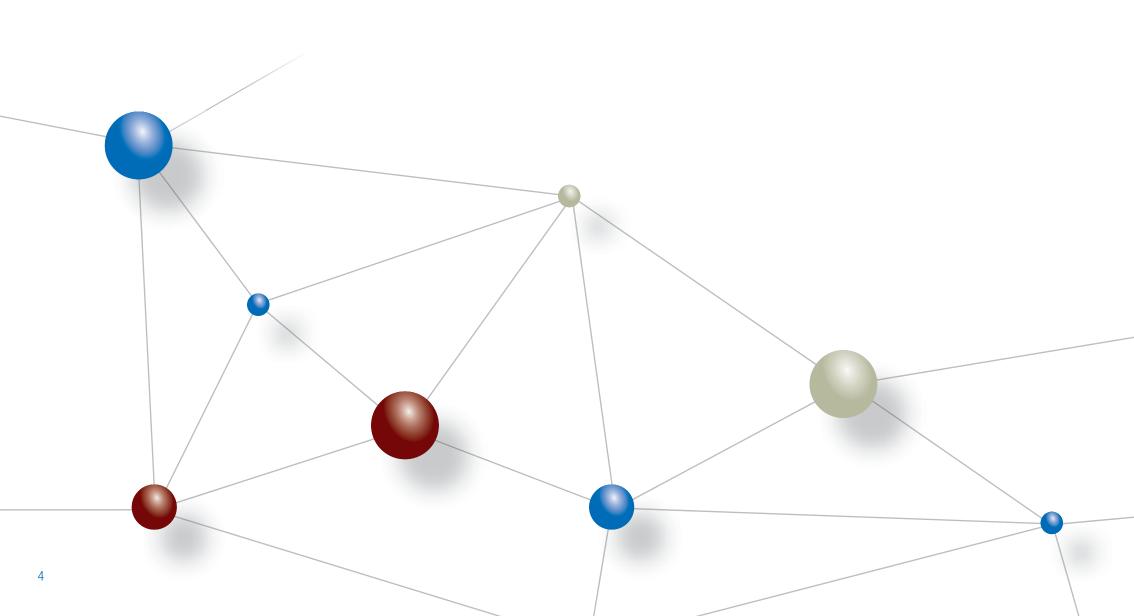
Basque Institute of Competitiveness

Deusto Foundation

The Institute developed an ambitious plan for publications, not just in top journals but also in the Basque and national press and in other journals of different fields of dissemination. Orkestra researchers published 17 articles in highly renowned international journals —11 of these in SSCI journals— and they ended the year with four articles accepted for publication in 2012. The launching of the new *Orkestra-Marcial Pons* collection, which joins the collection the Institute has been developing with *Deusto Publications*, is also worth mentioning. Throughout the year, researchers from the Institute published several books in English with prestigious publishing houses. One Orkestra book was published in Polish.

I hope these pages manage to convey the enthusiasm and commitment of all Orkestra professionals regarding the work carried out here. I would also like the entire Basque society and Spanish society in general, its public administrations, companies, intermediary organizations, and all the major players in improving sustainable development to value the role that Orkestra is playing in defining the paths needed to overcome the economic crisis and to transform the production model towards a direction that ensures the wellbeing of future generations. This undertaking would not be possible without the generous help of the Institute's public and private sponsors, who provide us with support in times of crisis. We would like to thank them.

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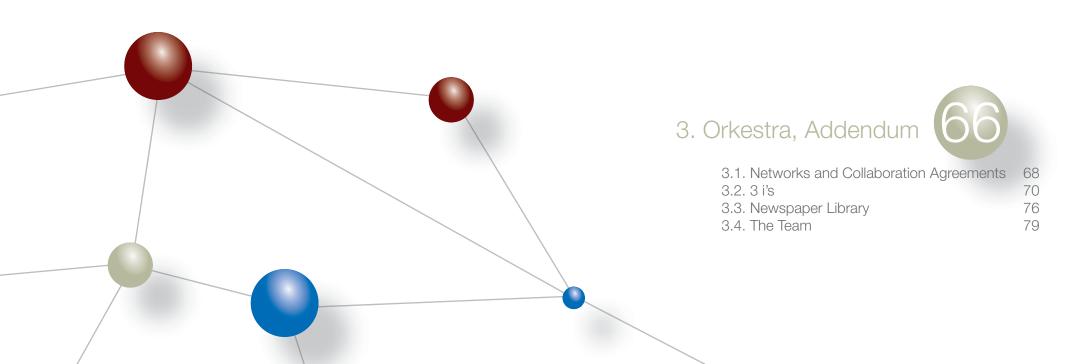
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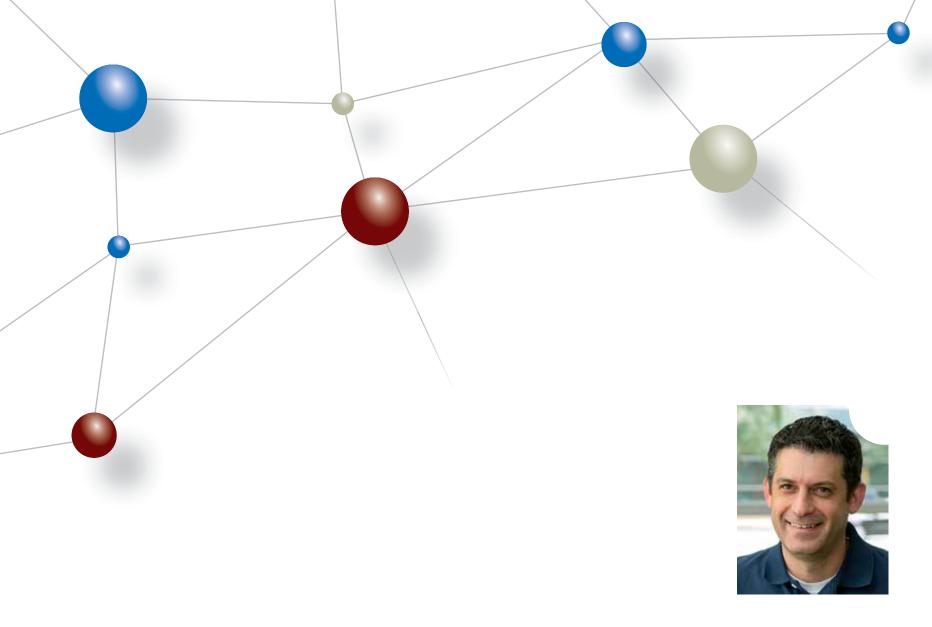
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"I was impressed by Orkestra's ability to bring together researchers, practitioners, policy formulators and society in general, to analyze the critical factors that pose challenges to competitiveness. Preparing for the 'new complexity' requires the ability to precisely weave inclusive networks made up of different textures".

Dan Breznitz

Associate Professor of International Affairs and Strategic Management The Sam Nunn School of International Affairs & The College of Management Georgia Institute of Technology

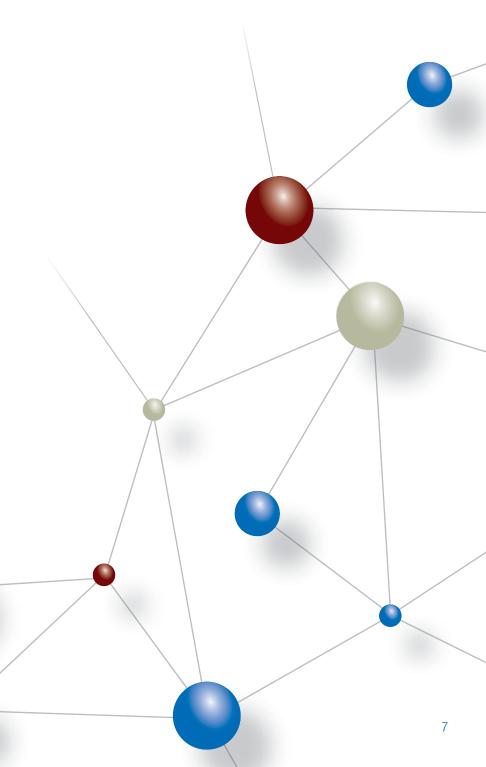


Orkestra, an Approximation

Orkestra-Basque Institute of Competitiveness celebrated its five-year anniversary in 2011. This has been a period of work at the service of competitiveness: the Institute's reason for being and existing, and its reason to continue doing so in the future.

Because competitiveness, with its intricate and complex paths, is not only Orkestra's vocation —it is also its passion. Professionals from different continents, countries, and cultures come together at this Institute, which has its roots in the Basque Country, in order to join forces in the interests of competitiveness.

Competitiveness is none other than the path leading to the wellbeing of the citizenry, to development of countries and territories, and to the future of generations to come. The following pages are a short journey, an approximation of the reality of Orkestra, the Basque Institute of Competitiveness.



1.1. What is Orkestra?

Orkestra-Basque Institute of Competitiveness is a center for analyzing and debating territorial competitiveness. It was founded in 2006 through the Deusto Foundation of the University of Deusto. The Institute is the result of a convergence of different private and public strategic initiatives, with the conviction that building competitive societies and companies is a necessary condition for prosperity.

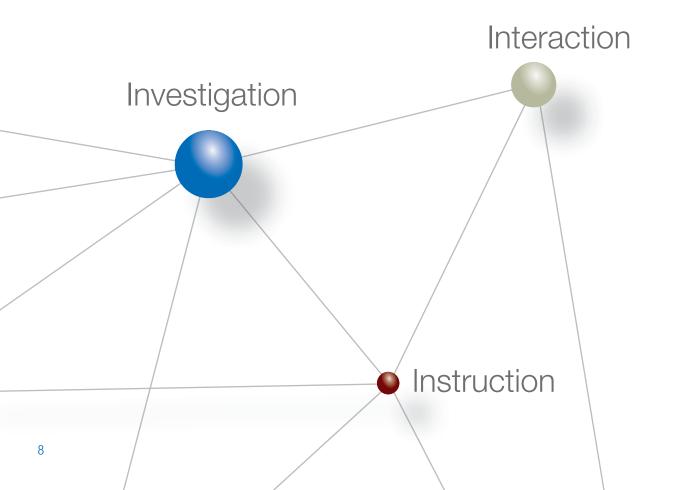
The Orkestra-Basque Institute of Competitiveness aims to position itself as an international benchmark for the analysis of territorial competitiveness. It also strives to be a major player in improving the Basque Country's sustainable competitiveness and to contribute to the improvement of citizen's wellbeing —always within the context of sustainable development. To that end, it promotes excellence in research, specialized educational programs, and permanent interaction with different economic agents.

Its main objectives include:

- Analyzing the competitiveness of the Basque economy and Basque society
- Reflecting on alternatives to improve competitiveness
- Assessing the impact of policies applied with a view to improving competitiveness
- Designing and promoting competitive strategies

Orkestra's strategic value is supported by:

- Acting as a link between excellent research and applying this research to improving competitiveness
- Being an interlocutor with the administrations that are involved in the territory, with the companies that have a leading role in competitive transformation, and with the players operating in civil society





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1.2. Sponsors

Public and private entities support Orkestra. The Basque Government, the Society for the competitive transformation (SPRI), and the Provincial Council of Gipuzkoa have participated actively in the Institute's consolidation. This public support is complemented by the participation of leading companies and private entities (Euskaltel, Kutxa, and Repsol-Petronor). The combination of public and private support has created a model of integration that is essential for the Institute's strength.















Gipuzkoako Foru Aldundia Diputación Foral de Gipuzkoa

REPSOL







For its part, the Chair of Energy, created in 2010, has the additional support of the Basque Energy Entity (EVE in its Spanish abbreviation), Gamesa, Iberdrola and the Boston Consulting Group (BCG).









1.3. Corporate Structure

Orkestra-Basque Institute of Competitiveness is structured around an organizational model that seeks to harmonize the interests of the different agents involved in enhancing competitiveness. In this way, it enables the objectives that the Institute set to be achieved.

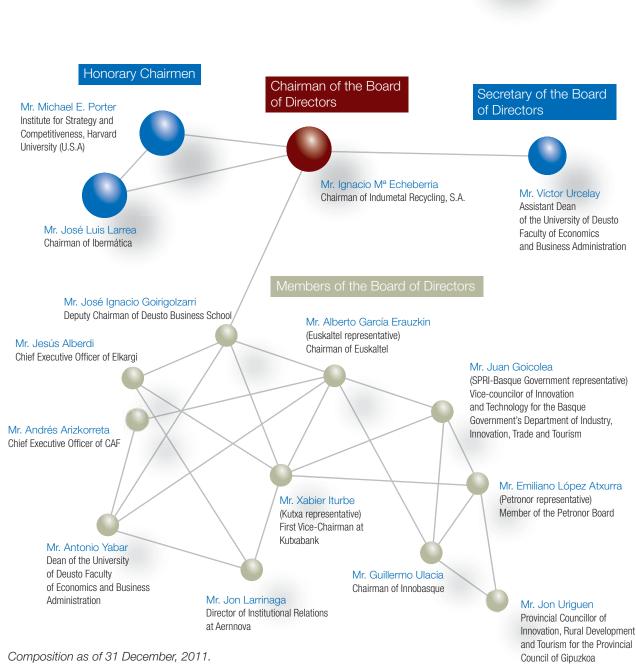


Orkestra's Board of Directors, a collegial and corporate body that is responsible for the Institute's management, held three meetings in 2011: on 2 February, on 10 June, and on 15 December. The meetings dealt with the Institute's own activities, its strategic positioning, corporate development, recruitment, economic and administrative management, as well as with internal initiatives carried out in the realms of investigation, interaction, and instruction.

Change in the Chairmanship

In 2011, Ignacio Mª Echeberria was named Chairman of the Board of Directors, replacing José Luis Larrea, who accepted the post of Honorary Chairman of the Institute. José Luis Larrea will continue supporting the Institute this way. The Institute's plans could not have become a reality without his efforts and personal commitment. The achievements described in this annual report are without a doubt an accurate reflection of his expertise and dedication.

2011 also witnessed two incorporations: that of Jon Larrinaga, appointed by the Deusto Foundation Council, and that of Jon Uriguen, on behalf of the Provincial Council of Gipuzkoa and replacing José Ramón Guridi. Orkestra thanks José Ramón Guridi for his effort, his dedication, and his contributions to the project.



Advisory Board

The Institute's Advisory Board, made up of international experts on competitiveness, advises the Board of Directors and its Chairman on the review and monitoring of how the Institute is running. Coinciding with the presentation of the 2011 Basque Country Competitiveness Report, it held its regular meeting on 7 July. At that meeting, it dealt with the challenges facing competitiveness in the context of the current economic crisis.

Its members contributed content to the 2011 Basque Country Competitiveness Report. Furthermore, Sandy K. Baruah participated in the "Building Regional Competitiveness in Europe" workshop, within the "Competitiveness Day" event. For his part, David Audretsch took part in the parallel workshop "Entrepreneurial Settings: Cause or Effect of the New Complexity?" and in the "Academic Entrepreneurship Workshop."

The Advisory Board consists of the following people:

Mr. Christian Ketels * Institute for Strategy and Competitiveness, Harvard University (U.S.A.) Mr. Sandy K. Baruah Detroit Chamber of Commerce (U.S.A.) Mr. Soumitra Dutta ** INSEAD (France) Mr. David Audretsch Institute for Development Strategies,

* Mr. Christian Ketels was appointed Chairman of the Advisory Board in January 2012, when this annual report was being written.

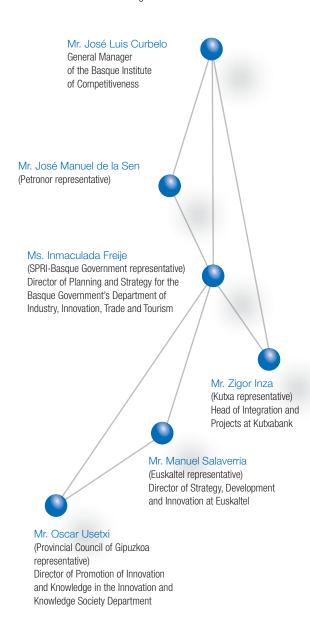
Indiana University (U.S.A.)

** Mr. Soumitra Dutta was recently appointed Dean of the Samuel Curtis Johnson Graduate School of Management at Cornell University, Ithaca (New York), a post he will assume on 2 July, 2012.

Monitoring Committee

The Monitoring Committee met on four occasions in 2011 (on 3 March, 26 May, 6 October, and 20 December). Its objective is to complement the official presence of the members of the Board of Directors, and to monitor the Institute's day-to-day activities with representatives appointed for that purpose.

The Members of the Monitoring Committee are:



Chair of Energy's Sponsor Committee

The Chair of Energy's Sponsor Committee met on four occasions in 2011 (on 5 May, 8 September, 17 November, and 19 December). It was created to make it easier to monitor the Chair's activities and to support the development of this initiative. Orkestra and prominent industry agents are represented on it.

The Members of the Chair of Energy's Sponsor Committee are:



^{*} He attends as a strategic partner of the Chair of Energy.

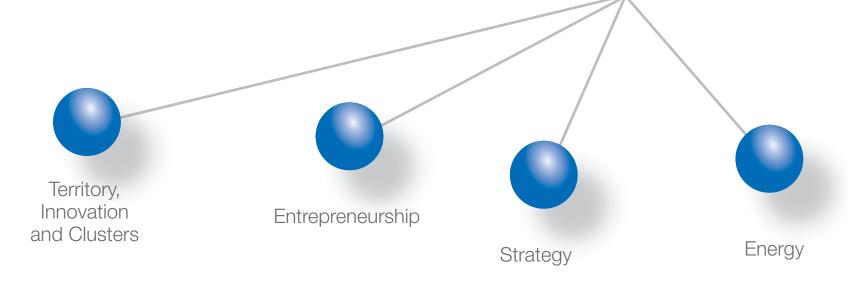
1.4. Corporate Development

In 2011, a major boost was given to the Strategy Department with the incorporation of its director, Bart Kamp, in September. The Energy Department's activities were consolidated as well, with the incorporation of research staff to the area.

Organizational Structure

The Orkestra-Basque Institute of Competitiveness has been endowed with an organizational structure based on effectiveness and efficiency criteria. In this structure, responsible governance criteria take precedence, which provides the flexibility, security, and immediacy that the management of an entity with these characteristics requires.

The Institute's organizational structure is as follows:



Support

Services

General

Management

Organizational chart on 31 December, 2011.

1.5. Activities: the 3 i's

The Institute's activities are framed within three basic functions: the so-called 3 i's. Orkestra's objectives are sought with their synergistic development:



Investigation

This is characterized by academic rigor, objectivity, and independence and integrated in a scientific research program defined by the Board of Directors in collaboration with private and public agents that are leaders on competitiveness. In 2011, 21 articles were published in scientific journals —11 of these were in internationally renowned prestigious journals (SSCI)— as well as six books and eight chapters in books.



Interaction

This is understood as the work of practical facilitation both in defining the subjects that are being studied, and in applying the results of this research. During interaction, the action component —which is the distinguishing ingredient of the Institute's research work— is manifested. In 2011, Orkestra organized 22 events (conferences, seminars, workshops, symposiums, etc.), with the participation of nearly 1,500 professionals, business representatives, public sector representatives, and socioeconomic agents in general.



Instruction

This is focused on specialization and aimed at setting content, accrediting programs, and designing and teaching the Institute's own programs. In 2011, over 600 people participated in educational programs organized by Orkestra. For their part, Orkestra's researchers collaborated in 10 educational sessions given by Deusto Business School.



To achieve its objectives, the Institute focuses on four very specialized and highly interrelated areas of expertise.



Territory, Innovation, and Clusters

This area is aimed at identifying, analyzing and improving the key factors for attaining sustainable territorial competitiveness.

Focus Areas

- Sustainable regional competitiveness.
- Innovation in public institutions and the efficiency of the institutional framework.
- Regional innovation system.
- Clusters.



Strategy

Studies the key factors in business competitiveness, and for that purpose, focuses on analyzing its markets, innovation processes, human capital, organization, and internationalization strategies. It reinforces this analysis with comparative studies of its competitive positioning vis-à-vis companies operating in other regions.

Focus Areas

- Innovation models and methods.
- Internationalization processes.
- Organizational dimensions and structures.



Entrepreneurship

This area focuses on studying the Basque entrepreneurial ecosystem, which is fundamental to succeeding in improving the quality and economic impact of entrepreneurial projects. The intention is to attain optimal conditions so that entrepreneurial initiatives can be forged and can thrive successfully.

Focus Areas

- Business demographics.
- Entrepreneurship with high growth potential: innovation and internationalization of startups.
- Intra-entrepreneurial activity among existing companies (spin-offs).
- Entrepreneurial ecosystem and regional competitiveness.



Energy

This area is focused on contributing to the dialogue on the possible solutions that enable attainment of energy that is economically efficient and environmentally sustainable and that contributes to competitive and industrial development.

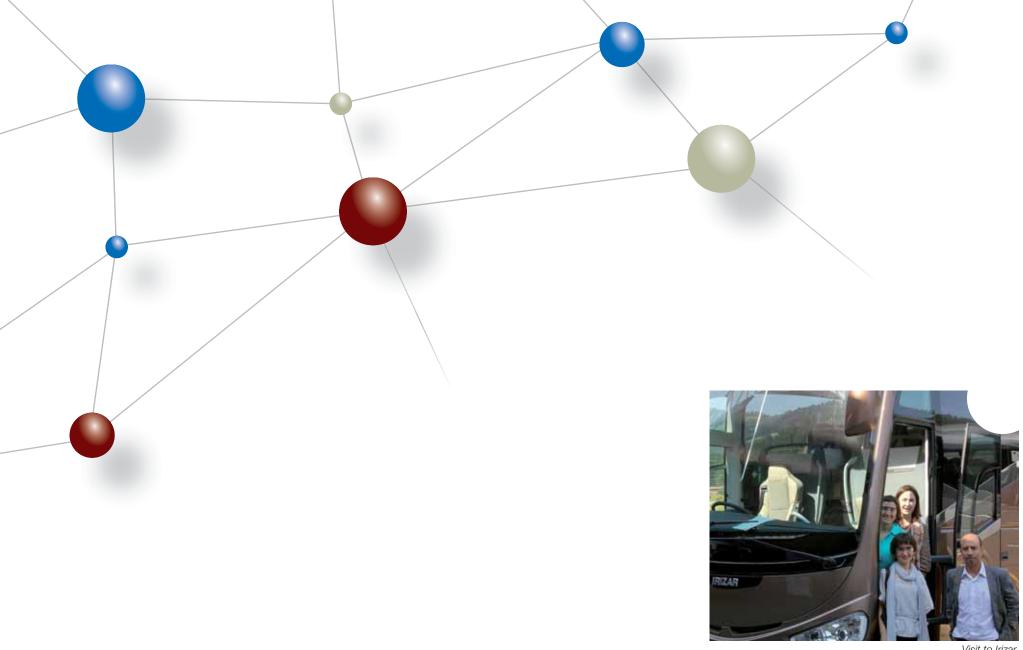
Focus Areas

- Energy: economy and markets.
- Transport and energy.
- Energy and industry: competitiveness and industrial development.
- The geopolitics of energy.



Basque Chair of Competitiveness (BCC)

The Basque Chair of Competitiveness is the vehicle set up by Orkestra to act as a transponder and accompaniment to economic and institutional agents in their expansion and establishment abroad. Through a network of nodes affiliated with prestigious academic institutions, the Chair supports the Institute's mission in countries that are of special interest for the Basque economy and for its agents and companies.



Visit to Irizar.

"Collaborating with Orkestra has enabled us to connect with the real situations of Basque companies. We have learned a lot in the discussions with researchers and with company directors. Our objective is to contribute to the debate about how to get out of this major economic crisis. The enthusiasm of both the company directors and the Orkestra researchers makes me believe that it will be possible sooner rather than later".

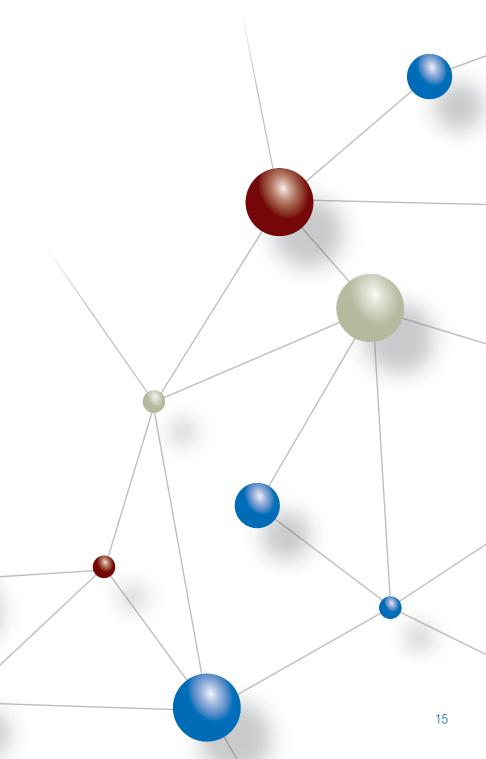
Lourdes Casanova
Professor in the Strategy Department at INSEAD

2.

Orkestra, Connectivity

Connectivity: the ability or skill some people or entities have to join, link, relate, and communicate to other people, systems, and factors, in such a way that something new and valuable may come out of this process, whether tangible or intangible.

This definition reflects with enough accuracy the role that, through its work, Orkestra plays in the complex and constantly changing setting of economic and business relations. Since it was launched, the Institute has shown itself to be capable of acting as a link between agents and factors that substantially affect the competitiveness of companies and consequently of territories. Orkestra, together with other agents, is contributing to building a network that is valuable and has values. This network unites efforts, determination, and initiatives, projecting them to the future. Academic production, projects, teaching, seminars, and conferences are the threads of this network.





Territory, Innovation and Clusters



European Cluster Observatory-II

Objective

Create an observatory, which is a one-stop entry point, in order to obtain information on clusters and regional competitiveness in Europe.

Partners

The European Commission, as a financing entity, and five international research centers: Stockholm School of Economics and Ivory Tower Aktiebolag, (Sweden); Clusterland Oberösterreich GmbH, (Austria); Zentrum für Innovation und Technik in NordrheinWestfalen GmbH (ZENIT), (Germany); Fondation Sophia Antipolis, (FSA), (France).

Major Milestones

- Participating in the "Expert Workshop on Service Innovation", organized by the European Commission's Directorate General for Enterprise. Brussels (Belgium), 8 June.
- Navarro, M.; Gibaja, J.; Franco, S.; Murciego, S. (2011). "Territorial benchmarking methodology: The need to identify reference regions", "Innovation, Strategy, and Structure: Organizations, Institutions, Systems and Regions DRUID Society 2011", Copenhagen (Denmark), 15-17 June.
- Organizing a working session on project monitoring. San Sebastián, 16 September.

Contribution to Improving Competitiveness

The platform joins together information from 260 European regions. It will therefore become an interactive benchmarking tool for the regions themselves. It will help academics and those responsible for devising policies to improve their relationships, since they will analyze the connections between a region's competitive environment, cluster development, and key indicators of regional performance.



Coordination and Monitoring of R&D at the Regional level in the EU

Objective

Analyze the participation of nine European regions in European Commission R&D&I programs.

Partners

Innova Europe, Technopolis, Centro di Resonanze Magnetiche (CERM), TASO Desarrollos, Vaasan Yliopisto, Gottfried Wilhelm Leibniz Universitat Hannover, University of Sheffield, Chambre de Commerce et d'Industrie de Paris (CCIP) ESIEE Paris, Universita della Svizzerá Italiana.

Major Milestones

 Submitting the report on receipt of the project to the European Commission.

Contribution to Improving Competitiveness

The project evaluates, in a group of European regions, the impact of grants on R&D&I in cluster development.



Gipuzkoa Sarean

Objective

Provide expert advising on participation methodologies, coordinating international experts.

Partners

Executed by the Provincial Council of Gipuzkoa and the Donostia-San Sebastián City Council. The University of Oxford and Mondragon Unibertsitatea collaborate.

Major Milestones

- Breakfast meeting "Los valores sociales en la nueva cultura científica y tecnológica". Víctor Pérez Díaz. Donostia-San Sebastián, 27 January.
- Presenting the Gipuzkoa Sarean project at the "Third Social Capital World Forum" event, University of Applied Sciences Vorarlberg, Austria, 23-24 September.
- Presenting scholarly communications at the "Interventions in Social Capital and Competitiveness" congress, Institute for Science, Innovation and Society, the University of Oxford, United Kingdom, 4 and 5 March, and at the "6th International Seminar on Regional Innovation Policies", Lund, Sweden, 13-14 October.
- "Desarrollo Territorial, Participación y Capital Social" seminar, coorganized with Agder Research. Presentations by James Karlsen (Agder Research), Mikaela Vasström (Agder Research), Janine Nahapiet (Green Templeton College), Francisco Alburquerque and Pablo Costamagna (experts on territorial development). Orkestra, Donostia- San Sebastián, 3 and 4 November.
- Publication of the book Capital social y valores en Gipuzkoa. Balance y líneas estratégicas de actuación. Provincial Council of Gipuzkoa, 2011, Donostia—San Sebastián.

Contribution to Improving Competitiveness

This project values the concept of social capital as the collective capacity to create interactions that favor economic, political, and cultural development. By analyzing the quality and intensity of social relations, and taking part in them, it positively affects Gipuzkoa's territorial development.



www.clusterobservatory.eu





Municipal Policies and Creating Innovative Local Environments

Objective

Explore the role that municipal policies can play in creating innovative local environments. Transfer this knowledge to learning processes with regional development agencies.

Partners

Ezagutza-Gunea (public-private partnership network made up of companies, educational centers, city councils, and the Urola Medio Regional Development Agency).

Major Milestones

Training sessions for the technical team that is in charge of interviews and workshops with companies, city councils, and educational centers.

Contribution to Improving Competitiveness

The tested methodology for participatory evaluation makes a significant contribution to improving territorial development networks in the Basque Country, most of which were created in the previous decade.



Learning from Difference

Objective

Generate learning processes among different innovation system agents of the Agder region (Norway) and of the Basque Country.

Partners

Agder Research (Norway).

Major Milestones

- Project progress meeting in Norway and visit to the Work Research Institute to present the project. Norway, 13-16 September.
- Results presentation seminar. Donostia-San Sebastián, 8 December.

Contribution to Improving Competitiveness

The project contributes to improving the Basque Country's collaboration policies. This is an important asset for competitiveness.





Innovation Indicators

Objective

Develop innovation indicators that are more suitable for the Basque Country, including those that are not based on science and technology.

Partners

Innobasque.

Major Milestones

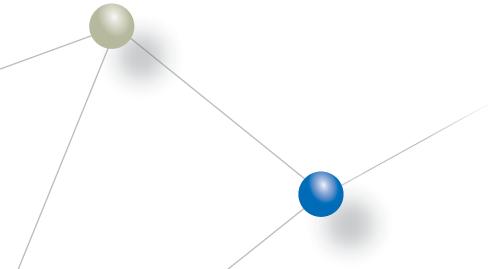
- Navarro, M. et al. (2011). Indicadores de innovación y Benchmarking. Reflexión y propuesta para el País Vasco. Innobasque; Basque Institute of Competitiveness-Deusto Foundation.
- Parrilli M.D.; Elola, A. (2011). "The strength of science and technology drivers for SME innovation". Small Business Economics, Vol. 36.
- Parrilli, M.D. (2011). "The Science and Technology drivers for SME Innovation". "EUNIP International Workshop on Evaluating Innovation Policy: Methods and Applications". Florence (Italy), 5-6 May.
- Parrilli, M.D. (2011). "Unveiling the black box of innovation". Workshop for the "ECO-CYCIT on Innovation and Market Dynamics" project. Orkestra- Basque Institute of Competitiveness. San Sebastián, 27-28 May.

Contribution to Improving Competitiveness

The project defines a system of indicators that correspond to the strategic orientation of the Basque country's economy. It will make it possible to know and improve the degree of effectiveness of the Basque innovation system, increasing its productivity and competitiveness.



Navarro, M.; Gibaja, J.J.; Franco, S.; Murciego, A.; Sáenz, J. (2011). Indicadores de innovación y Benchmarking. Reflexión y propuesta para el País Vasco. Bilbao: Innobasque; Basque Institute of Competitiveness-Deusto Foundation.



2.1. Projects



Technology/Innovation Infrastructure

Objective

Conduct a comparative analysis of different international innovation systems, with regards to both the agents and the functions of the infrastructures for provision of R&D&I services.

Partners

University of Agder (Norway), Basque Government Saiotek Program.

Major Milestones

 Compilation and in-depth revision of the literature on national and regional innovation systems, and of the literature that, with different approaches, deals with R&D&I infrastructure.



Contribution to Improving Competitiveness

The project enables reflection on the different functions that Basque R&D&I infrastructures should provide. In addition, it makes it possible to know the setup of these infrastructures in other reference territories.



Curbelo, J.L., Parrilli, M.D., Alburquerque, F. (coordinators) (2011). *Territorios Innovadores y Competitivos*. Madrid: Marcial Pons, Basque Institute of Competitiveness-Deusto Foundation.



Assessment of Innovation Policies

Objective

Assess innovation policies as an instrument to support policy learning.

Partners

Basque Government Saiotek Program.

Major Milestones

- Identifying the dimensions of the complexity of innovation policy systems.
- Developing a framework for integrated assessment of innovation policy systems.
- Training sessions with international experts on various elements for evaluating policies.
- Coordinating a workshop session on policy assessment at the TCI Annual Global Conference en Auckland (New Zealand).

Contribution to Improving Competitiveness

The project progresses in the conceptual analysis of the complexity of innovation policy systems, and it tests them by conducting a test case of multilevel innovation policy that impacts the Basque Country.



Global Value Chains

Objective

Generate knowledge about global value chains in the clusters. Apply it to Basque clusters and to the companies that make up those clusters in order to improve their competitiveness.

Partners

SPRI.

Major Milestones

- Participating in the workshop "El papel de los servicios en las cadenas globales de valor". Europe-Innova Project. Brussels (Belgium), 26 January and 24 February.
- Organizing the academic seminar "Clusters in Global Value Chains: What is the Role of Innovation Systems?". Donostia-San Sebastián, 20 and 21 October.
- "The Internationalization of the Wind Energy Value Chain: the Case of the Basque Country" presented at the workshop "Clusters in Global Value Chains: What is the Role of Innovation Systems?". Donostia-San Sebastián, 20 and 21 October.
- Report: La cadena de valor de la industria eólica: márgenes de crecimiento para el clúster vasco.
- Report: Clústeres en cadenas globales de valor/redes globales de producción: qué rol juegan los sistemas de innovación?

Contribution to Improving Competitiveness

The project makes it possible to identify and boost strategies for each of the companies that are part of a cluster and for collaboration structures among several of these companies, as well as for their territories. It promotes scenarios and alternatives that lead to increasing competitiveness.







Identifying Clusters in the Basque Country's Regions and Municipalities

Objective

Generate abilities that lead to clusterization processes, taking tools developed by the Institute to identify clusters that foster economic growth in their respective areas of influence and transferring them to agents from the different regions and municipalities.

Partners

Garapen, Basque Government, and SPRI's Compite Program.

Major Milestones

- Training sessions "Elaboración de mapeos clúster", Durango, 27 June and 15 September.
- Aranguren, M.J.; Azpiazu, A.; Larrea, M.; et al. (2011). Identificación de clústeres: un proceso de investigación-acción. Orkestra Report.
 Basque Institute of Competitiveness-Deusto Foundation.

Contribution to Improving Competitiveness

The project enables detection of the concentration of companies with the potential to facilitate and support positive cluster dynamics and the generation of economic activity.



Participatory Evaluation of Cluster Policy

Objective

Generate knowledge and methodologies to evaluate cluster policies.

Partners

Basque Government, Basque Country Aeronautics and Space Cluster Association (HEGAN), University of Deusto, and UPV/EHU.

Major Milestones

- Organizing the "Participatory Evaluation" workshop. San Sebastián, 26 January.
- Aragón, C.; Aranguren, M.J.; Diez, M.A.; Iturrioz, C.; Wilson, J. (2011). "Creating cooperation for clusters? Lessons from the implementation of a participatory evaluation process". "Regional Studies Association Annual International Conference". Newscastle, (United Kingdom), 17-20 April.
- Aragón, C; Aranguren, M.J.; Iturrioz, C.; Wilson, J.R. (2011). "A Participatory Methodology for Evaluating the Cluster Policy of the Basque Country". Orkestra Working Paper Series in Territorial Competitiveness. 2011-R01.
- Translation into Polish and publication of Aragón, C.; Aranguren, M.J.; Iturrioz, C. (2010). Evaluación de políticas clúster. Basque Institute of Competitiveness-Deusto Foundation.

Contribution to Improving Competitiveness

This project fosters the improvement of cluster policy and the role of clusters in the Basque Country's competitiveness.

Aragón, C.; Aranguren, M.J. Iturrioz, C. (2011). Ewaluacja polityk klastrowych Kraju Basków, Polska Agencja Rozwoju Przedsiębiorczości





Study on the Historical Legacy of Cluster Associations

Objective

Analyze the competitive advantages of the different clusters and their historical evolution. Reflect on their current challenges.

Partners

Eusko Ikaskuntza, University of Salamanca, and UPV/EHU.

Major Milestones

- Presentation of the book Los orígenes históricos del Clúster de la Industria Marítima y su legado para el presente. Bilbao Maritime Museum, 19 July.
- Valdaliso, J.; Elola, A.; Aranguren, M.J. (2011). "Social Capital, Internationalization and Absorptive Capacity: The Electronics and ICT Cluster of the Basque Country". Entrepreneurship and Regional Development. Volume 23 (9-10):707-733.

Contribution to Improving Competitiveness

The project makes it possible to identify the current challenges for the various clusters, helping to redefine their future strategies.



Article published in El País (20 July, 2011).



2.1. Projects



Approaching Governance through Action-Research

Objective

Generate knowledge about action-research methodologies, and then transfer this to agents in the environs.

Partners

Morten Levin (Norwegian University of Science and Technology), Garapen, Gipuzkoa Berritzen, Gipuzkoa Sarean, Innovanet, Innobasque, Basque Country Competitiveness Forum 2015.

Major Milestones

- Organizing an Action Network meeting on "Nuevas perspectivas del desarrollo territorial". San Sebastián, 9 March.
- Estensoro, M.; Larrea, M. (2011). "The Evolution of Local Development Agencies from Service Providers to Facilitators in Knowledge Networks in the Basque Country: the Role of Academic Expertise in the Change Process". Newcastle University, (United Kingdom), 17-20 April.
- Training on action-research methodologies given by Morten Levin, Professor in the Department of Industrial Economics and Technology Management (Norwegian University of Science and Technology). San Sebastián, 7 July.
- Organizing four workshops for technical experts and managers from the regional development agencies participating in the network: "Metodologías para fomentar la colaboración interempresarial y creación de redes locales: reconceptualizando qué es la actividad innovadora"; "Cómo pasar del benchmarking ingenuo a inteligente en el ámbito de la innovación"; "El papel de la agencia en la diversificación y transformación del tejido productivo hacia actividades Mayor valor añadido".

Contribution to Improving Competitiveness

This project influences multilevel governance, improving collaboration among institutions and among the wide range of networks that have been created at the regional level in the historic territory and in the Autonomous Community. For that purpose, the project relies on the use of action-research methodologies.



Advising on the Design, Implementation, and Assessment of the 2010-2013 Business Competitiveness Plan

Objective

Conducting analyses and participating in the 2010-2013 Business Competitiveness Plan Project Committee. Monitoring and assessment for the duration of the Plan.

Partners

Basque Government, Innobasque, and Euskalit.

Major Milestones

- Monitoring and assessing the execution of the 2010-2013 Business Competitiveness Plan.
- Organizing a training program on policy assessment for researchers linked to the project, held at Orkestra from 7 October to 25 November.
- Marian Diez (UPV/EHU).
- Federico Todeschini and María Antonieta Praera (Ivalua- Catalan Institute for Public Policy Evaluation).
- Eric Monnier (Eureval –Rimas Research Institute for Managing Sustainability).
- Michal Sedlako Rimas (Research Institute for Managing Sustainability).
- Aranguren, M.J.; Larrea, M. (2011). "Regional Innovation Policy Processes: linking learning to action". *Journal of Knowledge Econ*omy. Volume 2, Number 4, 569-585.

Contribution to Improving Competitiveness

Policy assessment contributes to improving the effectiveness and efficiency of public policies, and consequently, of competitiveness.



Innovanet Network

Objective

Help dynamize Red Innovanet, facilitating the connection between agents of different territorial units (districts, historic territories, regions).

Partners

The Basque Government, SPRI, and the three territorial nodes (Alava, Bizkaia, and Gipuzkoa).

Major Milestones

- Participating in the brainstorming sessions on network development strategy and presenting a networks and cooperation model at the sessions of the nodes of Gipuzkoa, Álava, and Bizkaia. 7, 8, and 23 June.
- Participating in the sessions for brainstorming about and proposing concrete actions. 22 and 27 September.

Contribution to Improving Competitiveness

The project helps to improve the innovativeness and competitiveness of small and medium Basque enterprises and facilitates connections between agents and the business sector.





Constructing Regional Strategies for Competitiveness (Smart Specialization)

Objective

Analyze the state of the art and conceptual progress of benchmarking and of constructing territorial development strategies, with emphasis on smart specialization strategies. In addition, analyze industry policy applied in the Autonomous Community of the Basque Country, and its insertion in territorial development strategies.

Partners

SPRI, Provincial Council of Gipuzkoa, UPV/EHU, University of Deusto, Harvard Business School, Contrast Group of the European Commission Smart Specialization Platform.

Major Milestones

- Preparation of the case The Basque Country: Strategy for Economic Development. Jesus Mari Valdaliso, under the guidance of Michael Porter and Christian Ketels, Harvard Business School Case Studies.
- Participation of Mikel Navarro as an expert member in the Contrast Group of the European Commission Smart Specialization Platform at the meetings in June and October.
- Participation in two workshops held in the European Commission Committee of the Regions: "Industrial Change and Smart Specialisation" and "New Practices in Regional Innovation Policy –towards Regionally Adapted Strategies". Brussels, (Belgium). 29 June and 28 October, respectively.
- Scholarly communications in seminars and conferences: "3rd European Conference on Corporate R&D and Innovation 2011", Seville, Spain and "Regional Studies Association Winter Conference 2011", London, United Kingdom, 6 October and 25 November, respectively.
- Publication of scientific articles:
- Boschma, R.; Minondo, A.; Navarro, M. (2011). "Related Variety and Regional Growth in Spain". *Papers in Regional Studies*. Online first: DOI: 10.1111/j.1435- 5957.2011.00387.x
- Navarro, M.; Aranguren, M.J.; Magro, E. (2011). "Estrategias de especialización inteligente: el caso del País Vasco". Orkestra Working Paper Series in Territorial Competitiveness no. 2011-R06.
- Navarro, M.; Aranguren, M.J.; Magro, E. (2011). "Smart Specialisation Strategies: the case of the Basque Country". Orkestra Working Paper Series in Territorial Competitiveness no. 2011-R07.
- Report: Smart Specialisation y Estrategia Regional.

Contribution to Improving Competitiveness

The project enables, through the use of smart specialization strategies, territorial approaches to be designed that help transform and diversify the economic structure, even with traditional sectors.



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15th TCI Annual Global Conference 2012

Objective

Organize the TCI Annual Global Conference 2012. www.tci2012.com

Partners

Basque Government, TCI, and the conference's Steering Committee, consisting of a multitude of agents from the Basque Country.

Major Milestones

- The designation of the Basque Country as host for the global conference in 2012.
- At the 14th TCl Annual Global Conference that was brought to a close in Auckland (New Zealand) on 2 December, the Basque Government and Orkestra took up the baton of organization for the next conference.
- Designing the website and the preliminary program of activities.

Contribution to Improving Competitiveness

It will connect socioeconomic agents from the Basque Country to some five hundred international delegates, including national and regional agencies, cluster associations, academic institutions, and companies —among other leading players in competitiveness.



www.tci2012.com

2.1. Projects

Entrepreneurship



Global Entrepreneurship Monitor for the Basque Country

Objective

Contrast the Basque capacity to create startups to that of other countries and autonomous communities. Compare the internal circumstances of the three Basque territories.

Partners

Eusko Ikaskuntza, University of Deusto, UPV/EHU, Mondragon Unibertsitatea.

Major Milestones

- González, J.L.; Martiarena, A.; Peña, I. (2011). "Exploring the Gap in Export Behavior between Male and Female Entrepreneurs", "VI GEM Workshop". Ceuta, 28 March.
- Publication of the report. Peña, Legazkue, I. (dir.) (2011). GEM-País Vasco 2010 (7) Eusko Ikaskuntza; Orkestra-Basque Institute of Competitiveness.



Contribution to Improving Competitiveness

The report sheds light on the role of entrepreneurship as the driving force behind the development of the Basque economy. It provides relevant statistics on entrepreneurial activities carried out in the three Basque territories. It also includes informed opinions from local experts.

Peña, Legazkue, I. (dir.) (2011). *GEM-País Vasco* 2010 (7) Eusko Ikaskuntza; Orkestra-Basque Institute of Competitiveness.



Crecer+ Platform: "Emprendedores Crecer+"

Objective

Identify entrepreneurs with innovative technology companies, and promote their business expansion, mainly in the areas of internationalization. Prepare for the process of seeking capital and channeling towards smart capital poles in order to dynamize and intensify entrepreneurship with high growth potential in the Basque country.

Partners

Basque Government, SPRI, Kutxa, local incubators (BEAZ, Bic Berrilan, CEIA, CEDEMI, ESTIA, Biokabi), technology centers (Tecnalia, IK4), and European business angel networks: Cambridge Business Angels; Oxford OION; E-100 London Business School; Cork BIC Sophia Business Angels.

Major Milestones

- Nearly 60 coaching sessions given with 43 companies, with the support of international and local coaches
- Organizing the second "Venture Contest", a forum for coaching and international investment. Eight Basque companies and 19 investors —coaches representing seven countries and six leading business angel networks in Europe—participated.
- Two businesses accompanied by "Emprendedores Crecer+" awarded in Europe by international business angels.
- Various companies with the support of "Emprendedores Crecer+" attained the injection of smart capital in Europe to finance their market expansion.

Contribution to Improving Competitiveness

The project contributes to improving Basque citizens' competiveness and wellbeing, to the extent that it facilitates the transition to a new economy based on knowledge, and strengthens an entrepreneurial group that has high growth potential and is globally competitive. It promotes the creation of new entrepreneurial projects to generate economic growth and job creation.







Crecer+ Platform: "Business Angels Crecer+" (BAC+)

Objective

Promote a community of business angel investors in the Basque Country who provide smart capital to entrepreneurs whose businesses are in their early stages and are forecast to grow quickly.

Partners

SPRI, Provincial Council of Gipuzkoa, AEBAN (Spanish Association of Business Angels), ESADE Business Angel Network, and EBAN (European Business Angel Network).

Major Milestones

- Closing two operations in 2011 in which business angels from the BAC+ network invested 300,000 euros. A 400,000 euro investment offer to a third company is under negotiation.
- Holding two investment forums –the first ones in the Basque Country– which over 30 investors attended and where 11 entrepreneurial projects with high growth potential were presented.
- Various projects with the support of "Business Angels Crecer+" were invited to participate in forums of other Government investment networks.
- EBAN Award for Most Attractive European Project for Investors given to a startup that was supported by "Business Angels Crecer+".
- Organizing a conference of the "Business Angels Crecer+" school, attended by nearly 30 potential investors in startups.
- Drawing up the proposal for tax advantages for business angels presented at several requests of the Public Administration of the Basque Country and of the National Government.

Contribution to Improving Competitiveness

The project promotes a tool that enables smart capital to be injected into startups, in order to facilitate the scalability of businesses in their early stages. In this way, and with various socioeconomic players (entrepreneurs, investors, management) orchestrating, the project contributes to the construction of a stronger, more competitive business sector and to job creation.







Entrepreneurial Ecosystem

Objective

Perform actions that favor the creation of an environment that fosters successful entrepreneurial projects that have economic impact .

Partners

SPRI, B+I.

Major Milestones

 Report: Vías para facilitar la apertura de empresas en el País Vasco.

Contribution to Improving Competitiveness

Improving a country's or territory's entrepreneurial ecosystem is critical to improving the quality and the economic impact of entrepreneurial projects, whose dynamics renew an economy's competitiveness.



Study on Intra-entrepreneurship Strategy and Tools

Objective

Engage in actions aimed at theoretical/practical reflection on the available tools and strategies for intra-entrepreneurship, in order to define a verified proposal of models that are applicable to companies and to regional settings.

Partners

Saiolan (Centro de Empresas e Innovación de Mondragón) and Goieki (Goierriko Garapen Agentzia), SPRI.

Major Milestones

- The task force's first report: De la Investigación a la acción: Una reflexión sobre las herramientas y estrategias de intraemprendimiento.
- Coduras, A.; Guerrero, M.; and Peña, I. Emprendimiento Corporativo en España. Report for the Directorate General of Policies for Small and Medium Enterprises. November, 2011.

Contribution to Improving Competitiveness

The project develops and applies methodologies that increase intraentrepreneurial activity as a tool for economic development and job creation.



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2.1. Projects

Strategy



Internationalization of Basque Companies in a Post-crisis World: Case Studies

Objective

Obtain recommendations for the positioning of Basque companies in the new post-crisis international context.

Partners

INSEAD, SPRI

Major Milestones

 Report: La internacionalización de la empresa vasca en el mundo postcrisis.

Contribution to Improving Competitiveness

The project makes it possible to draw lessons that contribute to the process of defining the internationalization strategy for companies. It is useful both for companies continuing with their international expansion and for those about to start it. It is also useful for defining public policies supporting internationalization.





Internationalization of Services in the Basque Country

Objective

Analyze industrial exports and services exports that have different added value, in order to define possible roadmaps for the Basque Country's future specialization.

Partners

University of Deusto.

Major Milestones

 Minondo A. (2011). "Exporters of Services in Spain". Orkestra Working Paper Series in Territorial Competitiveness. R04 WPS.

Contribution to Improving Competitiveness

The project contributes to developing export policies for the service sector, the greatest weight on the economic structures of developed countries.



Analysis of Emerging and Cross-cutting Technologies and of their Challenges and Implications for Making European R&D Policies

Objetivo

Equip the European Commission with an inventory on emerging technologies that have synergistic potential and that can be applied in multiple sectors, for policymaking aimed at boosting these technologies.

Partners 4 8 1

European Commission Directorate General for Research and Innovation.

Major Milestones

- Inventory and assessment of the maturity of emerging technologies.
- Recommendations for the systematic monitoring of emerging technologies.

Contribution to Improving Competitiveness

The project offers elements to endow R&D policies with a more strategic orientation. It offers an overview of emerging technologies in the immediate future.



Knowledge Transfer Initiatives as Tools for Boosting Companies' Propensity towards Open Innovation

Objective

Assess government programs aimed at helping companies, in collaboration with third parties, design innovation processes. Identify the participating companies' intention to practice open forms of innovation, on a larger scale, more often, and providing more of their own means.

Partners

University of Hertfordshire, School of Engineering and Technology, (United Kingdom).

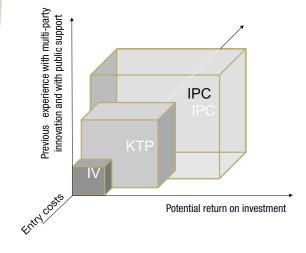
Major Milestones

- Kamp, B. (2011). "Evaluating Innovation Policy: Methods and Applications", "EUNIP", 6 May, Florence (Italy).
- Kamp, B., Bevis, K. (forthcoming 2012). "Knowledge Transfer Initiatives as a doorstep formula to open innovation" *Journal of Automotive Technology and Management*.

Contribution to Improving Competitiveness

The project has an impact on the introduction of new products into the market and on companies' capacity to open new markets, as well as on the weight of new products and markets in sales and business growth.

Findings from reviewed schemes in support of open innovation



Energy



Permanent Forum on Energy

Objective

Catalyze and lead forums for reflection, interaction, and debate on the energy sector.

Partners

Petronor, EVE, Iberdrola, Gamesa, BCG, and Energy Cluster.

Major Milestones

- Presentation of the book Los retos del sector energético. Bilbao, 1 April
- Participation in the conference "Gobernanza internacional de la energía y el cambio climático y oportunidades para la economía vasca". Donostia-San Sebastián, 3 June.
- Speech at the round table "Energías para un desarrollo sustentable". Oviedo, 9 June.
- Álvarez Pelegry, E. (2011). "Energía: renovables, gas y redes inteligentes". Revista Hermes, no. 38, pp. 22-29.

Contribution to Improving Competitiveness

Attaining a correct formulation of the proposals to improve energy policy as a major asset for competitiveness.



Cardenete, J.L.; Alvarez, E.; Curbelo, J.L. (coordinators) (2011). Los retos del sector energético. Marcial Pons; - Basque Institute of Competitiveness-Deusto Foundation.



The Economy and Electricity Markets

Objective

Analyze the current situation of electricity markets and their outlooks, as well as regulatory measures for market efficiency and the challenges in terms of renewable energies with a view to 2020.

Major Milestones

- Internal seminar: "Mercados eléctricos y renovables", Loiola, 19 and 20 May.
- Report: Prospectiva de mercados eléctricos, Jorge Karcsonyi and Yeray Pérez.
- Ciarreta, A.; Gutierrez-Hita, C.; Nasirov S. (2011). "Renewable Energy Sources in the Spanish Electricity Market: Instruments and Effects". Renewable and Sustainable Energy Reviews, 15 (5), 2510-2519.
- Ciarreta, A., Nasirov, S. (2011). "Market Power and Competition in the Iberian Electricity Market". *Energy Journal* (forthcoming).

Contribution to Improving Competitiveness

The project makes it possible to examine alternatives for incentivizing environmentally acceptable energies, so that, although these energies are less favorable in terms of costs, they can achieve competitiveness and market integration.





Energy, Technology and Industry: Economic and Industrial Development

Objective

Cooperate within a network of prestigious agents and institutions from the fields of energy, technology, and industry.

Partners

EVE, World Energy Council Spanish Committee.

Major Milestones

- Report: Coste y modelo de financiación de una economía baja en carbono, Boston Consulting Group.
- Organizing the conference "The British Electric Industry 1990-2010: the rise and demise of competition", Bilbao, 29 September.
- Organizing the conference on unconventional gas: "Shale Gas", Bilbao, 5 October.
- Organizing the seminar "Energy and Industry: Innovation and Technological Development in the new Energy Scenario". Bilbao, 10 and 11 November.

Contribution to Improving Competitiveness

The project strengthens the development of existing industries and the creation of new industries in the energy field, and consequently, competiveness in the territory.





Microeconomics of Competitiveness (MOC) Course

The MOC course offered by Orkestra deals with the microeconomic factors operating on firms and their environment, so as to prepare participants to understand and transform the competitiveness of organizations and of the territory.

The 2011 course was taught on the University of Deusto San Sebastián campus from 11 March to 17 June. It included a special edition on international competitiveness experiences taught by Alberto Pezzi, the then Chairman of TCI.

At the course's closing ceremony, the following speeches were given: "Programa de mejora de la competitividad: nuevas aportaciones" by Juan Miguel López, Head of Clusters for the Basque Government, and "Biociencias en el País Vasco: desarrollo regional mediante una estrategia integral y específica. Competitividad, diversificación y especialización inteligente" by María Aquirre, Head of the BioBasque Agency.

For their part, José Luis Curbelo, Mikel Navarro, and Bart Kamp took part in the MOC annual meeting. Held at Harvard (U.S.A.) from 11 to 13 December, it was preceded by the "MOC Network Cluster Research Workshop."



Energy Course: Opening Session.



MOC Course: Session on International Competitiveness Experiences.

Energy and Competitiveness: Gas, Networks and Renewable Energy Course

The Energy and Competitiveness Course, organized by the Energy Department within the framework of its focus area "Energy and Industry: competitiveness and industrial development," constitutes Orkestra's main milestone in terms of teaching for 2011. With a format and content that are unique and innovative, it aims to provide students with comprehensive knowledge on the gas, electricity, and renewables sectors. To that end, it starts from a general description of the energy sector, then delves in-depth into the fields of energy that are particularly relevant for the Basque Country —always with an international outlook.

The program consists of five modules. It starts from general aspects about energy, goes on to the study of gas, renewable energies, elec-

tricity networks, and smart grids, and concludes with energy and its relation to competitiveness. It also includes visits to energy facilities. Aimed at a very diverse group of professionals —from companies, consulting firms, institutions for collaboration, and universities— who want to deepen their knowledge of the energy sector, it is taught by 60 top professors with firsthand knowledge of the sector.

On 14 September at the Deusto Business School Faculty Club in Bilbao, there was a day-long conference to present the first edition of this course. José Luis Curbelo, General Manager of Orkestra, and Eloy Álvarez Pelegry, Head of the Energy Department and Course Director, took part in the conference. Juan Bachiller Araque, General Manager of Enerclub, was a collaborator and special guest. The course's opening session was held on 28 October, with the lesson taught by Xabier Garmendia, Vice-councilor of Industry and Energy for the Basque Government, who gave participants an overview of the Basque energy sector within the global energy context. Afterwards, the Course Director taught the first session, in which he analyzed the energy structure in the world and in Spain.



MOC Course: Family Photo.

Ph.D Course on Business Competitiveness and Economic Development

Jointly organized by Orkestra and Deusto Business School, the program is aimed at students pursuing doctorates with a focus on the study of competitiveness. Its main lines of research are: 1) innovation systems, growth, and territorial competitiveness; 2) entrepreneurial capacity; 3) clusters and regional development; 4) small and medium enterprises, family businesses, and business groups; and 5) corporate social responsibility. The program is coordinated by Davide Parrilli, senior researcher at Orkestra and full professor at Deusto Business School. Academic year 2011-2012 opened with its first session on 24 October, with the participation of students from the following countries: Germany, Argentina, Australia, Belarus, Colombia, El Salvador, Spain, Kazakhstan, Luxembourg, Mexico, Nepal, India, and Switzerland. Some of these students have international scholarships such as the Erasmus Mundus or UNESCO-Santander scholarships.



The Business Angels Crecer+ School is an initiative of "Business Angels Crecer+" (BAC+), which promotes the development of investment activity. It held its first conference on 2 November. Over 20 professionals participated in it, among them entrepreneurs, private investors, institutions that support entrepreneurship, executives, and people who are interested in learning about investment processes for new projects with high growth potential.

The course features the experience of business angels, who provide their vision on what markets are the most advantageous to invest in, as well as on issues related to taxation and investment processes, among other topics.







2.3.

Seminars and other Events

"Competitiveness Day 2011"

On 6 July, in the context of the presentation of the *Basque Country Competitiveness Report* 2011, the "Competitiveness Day 2011" conference took place at San Sebastian's Kursaal Conference Center. At the conference, conclusions were presented from the project in which every two years Orkestra analyzes the state of Basque Country's competitiveness.

Workshops

Four workshops took place during the morning session of the conference. They dealt with emerging issues that affect competitiveness, with a special focus on those factors that are influencing the ways the concept is understood and applied. They also tackled the contributions competitiveness can make in these times of crisis and uncertainty. The workshops included the participation of experts, as well as of professionals and academics of different nationalities.

"Entrepreneurial Environments: Cause or Effect of the New Complexity?"

The workshop focused on providing answers to the question of whether entrepreneurial settings are a cause or an effect of the new complexity that most countries are experiencing. It not only addressed the Basque entrepreneurial setting but also dealt with experiences in the configuration of the entrepreneurial settings of countries and territories such as Israel, Sweden, and Scotland.



"Constructing Regional Competitiveness in Europe"

The objective of this workshop was to study how public policies can play an effective role in building regional competitiveness in Europe. It sought to generate constructive debate regarding the challenges facing competitiveness policies in the context of the complexity that characterizes today's society and economy, by answering the question: How can regions lead the construction of a competitive environment that fits people's needs?.

"The internationalization of Firms in the New Complexity: Challenges and Opportunities"

The objective of this workshop was to debate the main challenges and opportunities presented by the internationalization of Basque companies in the current context of the liberalization and globalization of the world economy. The discussion focused particularly on the implications emerging markets have for companies' strategies.





"Aeging and Competitiveness"

This workshop tackled the consequences arising from the aging processes affecting a significant number of developed economies. Given that demographic forecasts estimate that this demographic change will have a significant impact in the Basque Country, particular attention was paid to analyzing the effects of aging on the Basque economy and Basque society, as well as to studying the policies designed to prevent or mitigate the consequences of this aging.



The presentation of the *Basque Country Competitiveness Report 2011* took place in the afternoon, during a ceremony/conference that over 600 representatives from the Basque Country's economic, business, financial, and institutional framework took part in. The conference was presided over by the President of the Basque Government, Patxi López. It also featured the participation of Dan Breznitz, a world-renowned expert on innovation.

Ignacio Ma Echeberria, Chairman of Orkestra, José Luis Curbelo, General Manager of Orkestra, and José Luis Larrea, Honorary Chairman, presented the Report, providing details on the contents and the main conclusions of the work. In his speech, Dan Breznitz analyzed various issues related to competitiveness and innovation in a globalized world that is affected by economic and financial imbalances.













2.3. Seminars and other Events

The Basque Country Competitiveness Report 2011. Leading the new complexity

The report explains how different global structural trends are giving rise to what the report calls the *new complexity*, in which several trends come together: 1) globalization; 2) the availability of natural resources, the demographic structure, and global demand patterns; and 3) the complexity stemming from the need to reconcile various objectives in economic policy.

Starting from this context, the Report is divided into two main parts. The first part makes a diagnosis of the Basque Country's competitiveness, by a comparative analysis vis-à-vis European regions, and by a comparative analysis vis-à-vis 30 reference regions that are more similar in terms of their geo-demographics and their economic structures. It completes this diagnosis with an analysis of the Basque Country's cost structure and productivity structure, studying the costs and prices that determine its products' competitiveness and studying the proportional share Basque exports have of the global economy.

The second section of the report identifies three central themes that the compared experiences show to be essential for long-term competitiveness in the context of the new complexity: the diversity of the economy and its agents; the abilities and learning that characterize individuals and organizations; and the openness and connectivity, both internal and external, of the territory and its players.

CONCLUSIONES DEL GONDANIONES D

As a general conclusion, the Report emphasizes that the Basque Country is in a good position —with its strengths and weaknesses— to lead in the context of the emerging new complexity. It points out that this leadership should:

- Lead to society's progress and wellbeing.
- Be built on assets inherited from the past, which are inserted into a certain social, economic and cultural context. Cut-and-paste business as usual is no good.
- Back industry, and more specifically, new industry, which includes the necessary business services that contribute knowledge to companies.
- Build policies that are increasingly proactive in the framework of competitiveness in solidarity.
- Promote policies that are horizontal in nature, which operate with a view of the system.
- Face the challenge in interconnectedness and of multilevel governance.
- Lead to policies that are more participatory (in the design phase) with the challenge of integrating participation throughout the entire life cycle of the policies.





Presentation of the Book Los retos del sector energético

In fulfillment of the commitment taken on during the "First Permanent Forum on Energy" held in 2010, the book *Los retos del sector energético* was presented at the CRAI Library on the University of Deusto Bilbao campus. The event, held on 1 April, which over 70 professionals from the energy sector participated in, was presided over by Xabier Garmendia, Vice-councilor of Industry and Energy for the Basque Government. It included the participation of José Luis Curbelo, General Manager of Orkestra, Juan Luis López Cardenete, coordinator of the book and professor at IESE, and Eloy Álvarez Pelegry, Head of the Energy Department.

The book shows the importance of energy to the industrial structure's competitiveness, as well as the implications the energy sector has for the development of industry and of new technologies. Furthermore, it



tackles key topics for the energy sector's future, such as climate change, renewable energies, and oil prices. It does not leave out geopolitical issues stemming from the complex relationships between exporting countries and consuming countries, or the unequal distribution of the reserves, among other subjects that are relevant to the sector.

Presentation of the Book Análisis sobre ciencia e innovación en España

Prepared by the Spanish Science and Technology Foundation (FECYT), the book conducts an in-depth analysis of Spain's science and innovation system. Throughout its 26 chapters, the more than 50 authors who took part in writing for the project analyze the current research and development situation in Spain, with an analysis of scenarios that goes beyond simple descriptions of the evolution of indicators and delves further into a contextualization with the different policies promoted in this field.

The book was presented on 14 April at an event held in the Gipuzkoa Chamber of Commerce. Present at the event were Juan Goicolea, Vice-councilor of Innovation and Technology for the Basque Government, José Luis Curbelo, General Manager of the Institute, Pedro Esnaola, Chairman of the Gipuzkoa Chamber of Commerce, Luis Sanz Menéndez, coordinator of the book and Head of the Institute of Public Goods and Policies of the Higher Council for Scientific Research (CSIC), and Mikel Navarro, senior researcher at Orkestra.



"Academic Entrepreneurship Workshop"

This workshop was held on 8 and 9 September in collaboration with professors Al Link from the University of North Carolina at Greensboro (U.S.A.), Andrea Höfer from the Organization for Economic Co-operation and Development (OECD) LEED program, and David Audretsch, member of Orkestra's Advisory Board. Its objective was to examine the role that universities and higher education institutions play in entrepreneurship and the transfer of knowledge and innovation to companies and to society. In this context, the workshop focused on the role that entrepreneurial research should play.

Some 30 professionals and academics —both national and international—who are experts on entrepreneurship participated in the workshop; among them were Cristiano Antonelli, Economics professor at the University of Turin (Italy), Mike Wright from the University of Nottingham (United Kingdom), Andrea Höfer from the OECD's LEED program, and Sara Secall from the European Commission. The papers presented will be included in two special issues of the scientific journals *Economic Development Quarterly* and *Economics of Innovation and New Technology*.

Parallel to that, the 2010 *Global Entrepreneurship Monitor* (GEM) Report on the Basque Country was presented. This study analyzes Basque entrepreneurial behavior and compares business creation in the Basque Country to that in the other autonomous communities and to that in other countries.



2.3. Seminars and other Events

"Conference on Unconventional Gas: Shale Gas"

This conference, which was organized in collaboration with the World Energy Council Spanish Committee, took place on 5 October and included the participation of 80 professionals.

The meeting dealt with the perspectives and implications of unconventional gas, both nationally and internationally. It benefited from the contributions of renowned industry experts, who laid out their different views on the challenges that the gas sector faces today.

The forum also served as the stage for the presentation of the project on this matter carried out by the World Energy Council.





"Workshop on Clusters in Global Value Chains"

Some 30 experts took part in this workshop, held on 20 and 21 October, with the objective of offering a space to analyze theoretical, empirical, and methodological studies that are related to the role innovation systems play in clusters that are part of global value chains.

Over the two days, scholars from highly renowned international centers such as Cardiff and Manchester (United Kingdom), Lund (Sweden), Piemonte Orientale (Italy), the Autonomous University of Madrid, UPV/EHU, and Orkestra –among others– presented and discussed their papers with the other participants.

Notable participants included the guest speakers Phillip Cooke from Cardiff University, Hubert Schmitz from the Institute of Development Studies of the University of Sussex (United Kingdom), and Henry W. Yeung from the National University of Singapore.

"Energy and Industry: Innovation and Technological Development in the new Energy Scenario"

Jointly organized by Orkestra and the Basque Energy Entity and held on 10 and 11 November, this seminar included the participation over 100 professionals from the national and international energy sector. During the seminar, the Basque Country Energy Strategy 2020 and the Science, Technology, and Innovation Plan (PCTi 2015) were presented. At the same time, the role of technological agents in the Basque Country was addressed.

Starting from the argument that energy and industry are closely linked —from the point of view of both supply and consumption— and that in a scenario of economic change and policies focused on reducing CO2 gas emissions, the energy and industry binomial becomes a key element for the competitiveness of the territories, the conference allowed

for reflection on issues such as the new perspectives and patterns of energy demand; the implications climate change has for companies; new energy technologies; and energy storage.

Moreover, the following subjects were presented: the United States' view regarding geopolitics and energy strategies; the United States' new energy and innovation policies; energy relations with the Middle East and North Africa in the current political scene; the European energy challenge; and the cases of China and India in view of this new situation.

Renewable energies were a core element of the dialogue throughout the seminar and in the parallel sessions that took place during it.

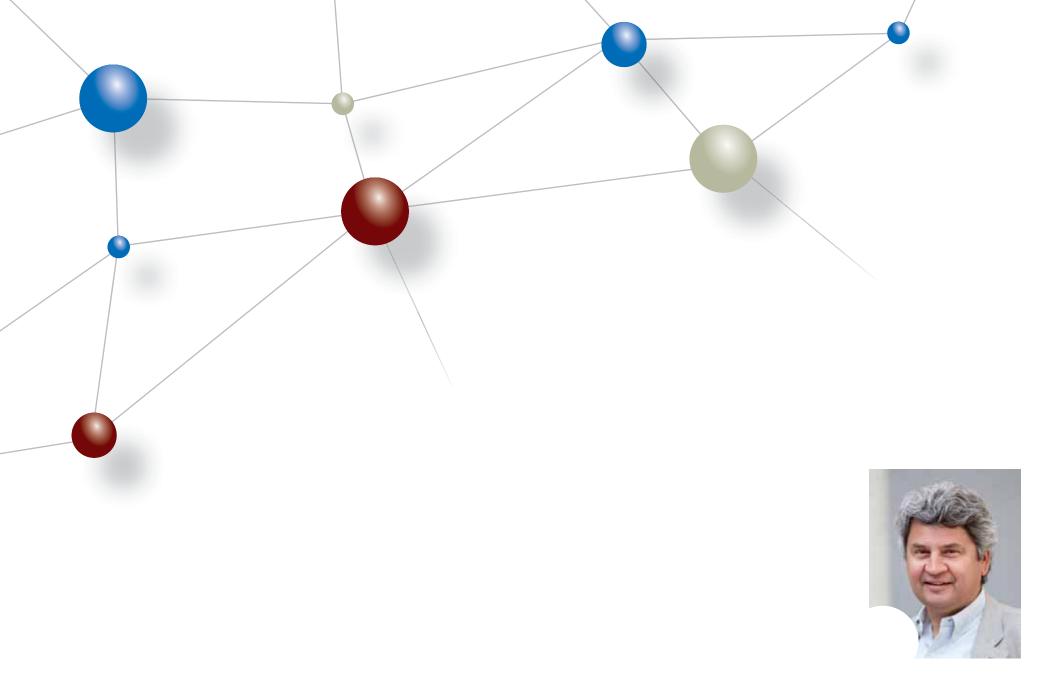




Competitive Debates

The objective of Orkestra's Competitive Debates is to provide a space that allows for the exchange of reflections, experiences, and opinions pertaining to competitiveness. This initiative started in 2010, and was consolidated throughout fiscal year 2011, when the following debates were held:

- Roberta Rabellotti: "Why do Chinese Companies invest in Europe?"
 9 February.
- Janine Nahapiet: "Understanding intra and inter organizational social capital". 24 March.
- Jon Landeta and Felipe Serrano: "Formas de organización y actividad innovadora: un análisis comparativo de los sectores manufactureros de la CAPV, España y la Unión Europea". 6 May.
- Amit Kapoor: "India's Competitiveness: Doing Business in India?" 15 September.



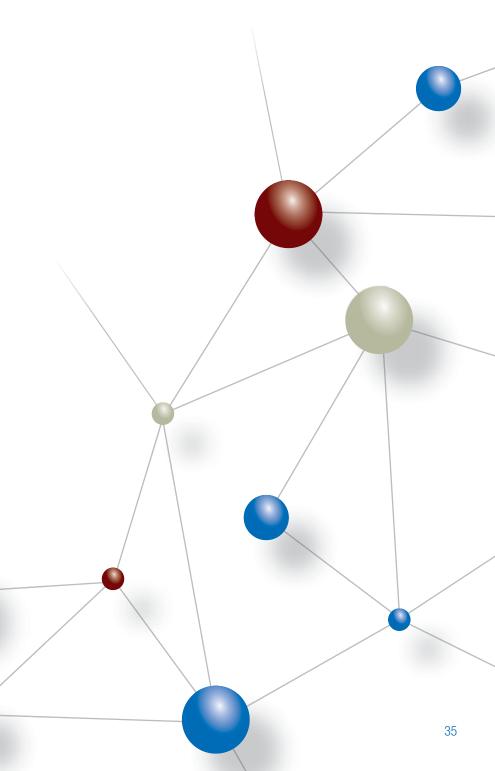
"Working with Orkestra has connected me with some of the most renowned European experts in the fields of regions, clusters, and competitiveness".

Örjan Solvell
Deputy Chairman of Stockholm School of Economics (Sweden)

3.

Orkestra, Addendum

Addendum, extension, addition. There are many actions, initiatives, projects, collaboration agreements, publications, scholarly communications, meetings, events, articles, press releases, etc. that form part of the work carried out by Orkestra in 2011 and that —due to limitations of space— could not be fit in the previous section. This addendum refers to some of these activities and ends with a list of the people—the human team—that constitute and give life to the Basque Institute of Competitiveness. Sometimes, what comes last is the first and the most important. This is the case here.

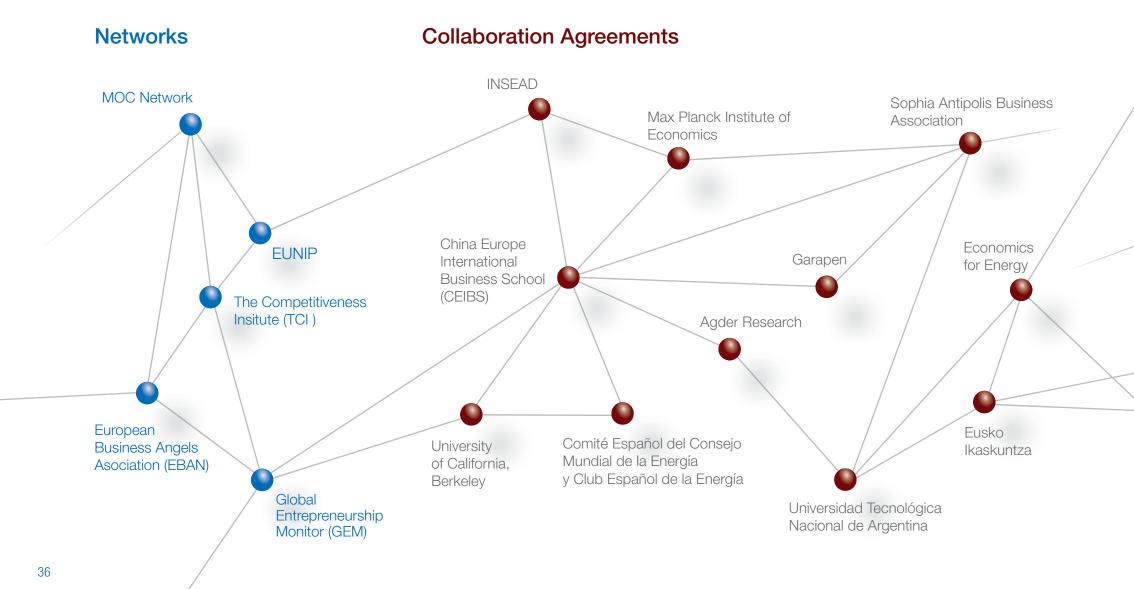


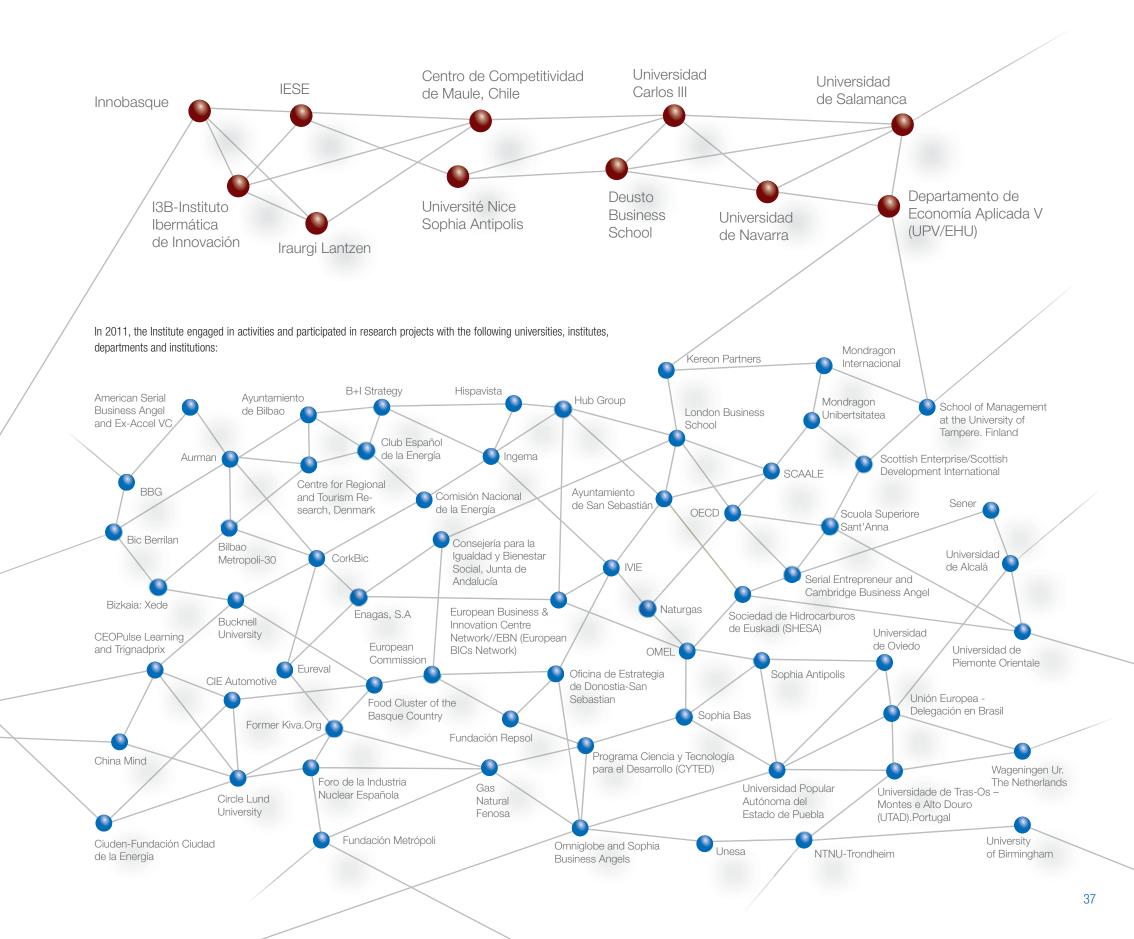
3.1. Networks and Collaboration Agreements

Membership in excellent worldwide and local networks, promoting different levels of collaboration with other institutions, and developing activities with diverse agents, enable Orkestra to fuel its research processes, by comparing, applying and enriching them.

Institute for Strategy and Competitiveness (ISC) - Harvard University









The contributions of the 3 i's arising from the previously described research and action areas are detailed below.

Investigation

...academic rigor, objectivity, and independence...

Publications

- ÁLVAREZ PELEGRY, E. (2011). "Energía: Renovables, Gas y Redes Inteligentes". Revista Hermes. No. 38, pp. 22-29.
- ÁLVAREZ PELEGRY, E. (2011). Reflexiones sobre la energía, in Cardenete, J.L. et al., Los retos del sector energético. Marcial Pons; Basque Institute of Competitiveness- Deusto Foundation, pp. 191-198.
- ARAGÓN, C.; ARANGUREN, M.J; ITURRIOZ, C.; WILSON, JR. (2011).
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- ARAGÓN, C.; ARANGUREN, M.J; ITURRIOZ, C.; WILSON, JR. (2011).
 Una metodología participativa para la evaluación de la política de clústeres del País Vasco, in Curbelo, J.L. et al. Territorios Innovadores y Competitivos, Marcial Pons; Basque Institute of Competitiveness- Deusto Foundation, pp. 319-341.
- ARANGUREN, M.J., MAGRO, E., and NAVARRO, E. (2011). La estrategia territorial. First report of the project: "Estrategia territorial y especialización inteligente". Submitted to the Provincial Council of Gipuzkoa. San Sebastián, 29 July.
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- CARDENETE, J.L.; ALVAREZ, E.; CURBELO, J.L. (coordinators) (2011). Los retos del sector energético. Marcial Pons; Basque Institute of Competitiveness-Deusto Foundation.

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- CURIEL, L.; GONZÁLEZ, J.L.; JUNG, A.; LÓPEZ, M.A.; PEÑA, I. (2011). "The Relationship between Firm Start-up Rates and the Development of an Entrepreneurship Education System in a Local Economy". International Journal of Entrepreneurial Venturing. (Forthcoming).
- GONZÁLEZ, J.L.; GUERRERO, M.; PEÑA, I. (2011). Estratategias de crecimiento en nuevas empresas: el caso de Virtualware S.A. in Manual de Casos sobre Creación de Empresas en España. Mc Graw Hill Publishing Company, pp.114-126.
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- NAVARRO, M.; ARANGUREN, M.J.; MAGRO, E. (2011). "Estrategias de especialización inteligente: el caso del País Vasco". *Orkestra Working Paper Series in Territorial Competitiveness*, No. 2011-R06 (CAS).
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- PEÑA, I. (dir.) (2011). Global Entrepreneurship Monitor. Autonomous Community of the Basque Country. Executive Report 2010. Donostia-San Sebastián: Eusko Ikaskuntza; Basque Institute of Competitiveness-Deusto Foundation.
- TELLADO, N. et al. (2011). "Retos y oportunidades para la transición de la edificación hacia la sostenibilidad en la CAPV". Ekonomiaz no. 75 Ecoinnovación más allá de los factores, la productividad de los recursos naturales.
- VALDALISO, J.; ELOLA, A.; ARANGUREN, M.J.; LÓPEZ, S. (2011).
 "Social capital, internationalization and absorptive capacity: The electronics and ICT cluster of the Basque Country". Entrepreneurship and Regional Development. Online first: DOI: 10.1080/08985626.2010.505268

Academic Presentations

- GONZÁLEZ, J.L.; MARTIARENA, A; PEÑA, I. (2011). "Exploring the Gap in Export Behavior between Male and Female Entrepreneurs". VI GEM Workshop. Ceuta, 28 March.
- ARANGUREN, M.J.; LARREA, M.; KARLSEN, J. (2011). "Connecting regional innovation systems: new policies for new challenges in Gipuzkoa". *Institute for Science, Innovation and Society*. The University of Oxford, United Kingdom, 4 and 5 March.
- ARAGÓN, C.; ARANGUREN, M.J.; DIEZ, M.A.; ITURRIOZ, C.; WILSON, J. (2011). "Creating Cooperation for Clusters? Lessons from the implementation of a participatory evaluation process". *Regional Studies Association Annual International Conference*. Newcastle (United Kingdom), 17-20 April.
- ESTENSORO, M.; LARREA, M. (2011). "The evolution of local development agencies from service providers to facilitators in knowledge networks in the Basque Country: the role of academic expertise in the change process". Regional Studies Association Annual International Conference. Newcastle (United Kingdom), 17-20 April.
- MAGRO, E.; WILSON, J. (2011). "Complex innovation policy systems: Towards an evaluation mix". Regional Studies Association

- Annual International Conference. Newcastle (United Kingdom) 17-20 April.
- MAGRO, E.; WILSON, J. (2011). "Complex innovation policy systems: Towards an evaluation mix". Research seminar on market structure and business dynamics. Orkestra-Basque Institute of Competitiveness, 26 and 27 May.
- PARRILLI, D. (2011). "The Science and Technology drivers for SME Innovation". EUNIP International Workshop on Evaluating Innovation Policy: Methods and Applications. Florence (Italy), 5-6 May.
- PARRILLI, D. (2011). "Unveiling the black box of innovation". Workshop of the project ECO-CYCIT on Innovation and Market Dynamics. Orkestra- Basque Institute of Competitiveness. San Sebastián, 27-28 May.
- ESTENSORO, M. (2011). "Local networks advancing towards socially innovative territories. The case of the Basque Country and Goierri county". PhD Course on redefining a critical edge of sustainability: possibilities from an action research approach (ARALIG network). Roskilde (Denmark), 6-9 June.
- NAVARRO, M.; GIBAJA, J.; FRANCO, S.; MURCIEGO, S. (2011).
 "Territorial benchmarking methodology: The need to identify reference regions". *Innovation, Strategy, and Structure: Organizations, Institutions, Systems and Regions DRUID Society 2011*. Copenhagen (Denmark), 15-17 June.
- MINONDO, A.; BOSCHMA, R.; NAVARRO, M. (2011). "Product-relatedness and the emergence of new industries at the regional level". Third Global Conference on Economic Geography. Seoul (Korea), 30 June.
- FRANCO, S.; NAVARRO, M.; GIBAJA, J.J.; MURCIEGO, A. (2011).
 "Territorial benchmarking methodology: The need to identify reference regions". European Regional Studies Association (ERSA) Congress.
 Barcelona, 30 August-3 September.
- GONZÁLEZ, J.L.; PEÑA, I. (2011). "Export-oriented entrepreneurship and economic growth". 51st European Regional Studies Association (ERSA) Congress. Barcelona, 30 August-3 September.
- PARRILLI, D. (2011). "The new complexity: new dynamics in clusters and districts". European Regional Studies Association (ERSA) Congress. Barcelona, 30 August- 3 September.
- PARRILLI, D. (2011). "Business competitiveness and economic development: the PhD programme of Deusto University and Orkestra". European Doctoral Programmes Association in Management and Business Administration (EDAMBA) 21st Annual Meeting. Barcelona, 4-6 September.

- GONZÁLEZ, J.L.; KUECHLE, G.; PEÑA, I. (2011). "An assessment of the determinants of university technology transfer". Workshop on Academic Entrepreneurship. San Sebastián, 8-9 September.
- GUERRERO, M.; URBANO, D. (2011). "Academic entrepreneurship and the entrepreneurial university: A theoretical approach". Workshop on Academic Entrepreneurship. San Sebastián, 8-9 September.
- NAVARRO, M.; GIBAJA, J.J.; FRANCO, S.; MURCIEGO, A. (2011).
 "Territorial benchmarking methodology: The need to identify reference regions". 3rd European Conference on Corporate R&D and Innovation CONCORD-2011, Seville, 6 October.
- NASIROV, S. (2011). "Analysis of Azerbaijan Oil and Gas Sector". 30th USAEE/IAEE North American Conference, "Redefining the Energy Economy: Changing Roles of Industry, Government and Research". Washington, D.C. (U.S.A.), 9-12 October.
- ELOLA, A.; LÓPEZ, S; VALDALISO, J. M. "The competitive position of the Basque aerospace cluster in GVCs: a historical analysis". Workshop on Clusters in Global Value Chains: What is the role of innovation systems? Orkestra. San Sebastián, 21-22 October.
- ELOLA, A.; PARRILLI, M.D.; RABELLOTTI, R. (2011). "The internationalization of the wind energy value chain: the case of the Basque Country". Workshop on Clusters in Global Value Chains: What is the role of innovation systems?. Orkestra. San Sebastián, 21-22 October.
- GUERRERO, M.; GONZÁLEZ, JL.; PEÑA, I. (2011). "Evolving Corporate & Strategic Entrepreneurship: The Case of a Spanish Multinational Enterprise". Research in Entrepreneurship and Small Business (RENT XXV). Bodo, (Norway), 16-18 November.
- NAVARRO, M.; ARANGUREN, M.J.; MAGRO, E. (2011). "Smart Specialisation Strategies: the Case of the Basque Country". Regional Studies Association Winter Conference 2011, Contested Regions: Territorial Politics and Policy. London (United Kingdom) 25 November
- PEÑA, I. (2011). "Investigación en Creación de Empresas". I Encuentro Internacional de Expertos en Emprendimiento. University of Cantabria, Santander. 28-30 November.

Interaction

...providing practical facilitation in the application of competitive strategies...

- "Participatory Evaluation" Workshop. Organized by Orkestra. San Sebastián, 26 January.
- "El papel de los servicios en las cadenas globales de valor". (Europe-Innova Project) Participation of Orkestra in this workshop organized by TNO of Holland. M. Davide Parrilli. Brussels (Belgium), 26 January and 24 February.
- Business Angels Crecer+ Association Establishment Event. San Sebastián, 3 February.
- Visit to Agder Research. (Orkestra-Agder Research collaboration agreement) Orkestra, Deustotech, and Deusto Business School representatives. Norway, 14-16 February.
- Nuevas perspectivas del desarrollo territorial. Meeting organized by Orkestra. Participants in Local Networks and Action Network projects. San Sebastián, 9 March.
- Signing of collaboration agreement between Orkestra and Saiolan.
 March
- "Reconceptualizando qué es la actividad innovadora" Workshop.
 (Orkestra-Garapen collaboration agreement). San Sebastián, 29
 March
- Los retos del sector energético. Book presentation organized by Orkestra. Bilbao, 1 April.
- Participation of Orkestra in the second meeting of the Steering Committee of the Regional Innovation Monitor (RIM). Mikel Navarro. Brussels (Belgium), 5 April.
- "Regional Innovation Systems and Food". Seminar organized by Orkestra. 1 April.
- Business Competitiveness Plan 2010-13. Participation in the monitoring meetings. 14 April, 12 May and 20 June.
- Análisis sobre ciencia e innovación en España. Book presentation organized by Orkestra. Gipuzkoa Chamber of Commerce. San Sebastián, 14 April.
- "Benchmarking y emprendimiento de alto potencial" Workshop (Orkestra-Garapen collaboration agreement) San Sebastián, 4 May.
- "First Business Angels Crecer+ Investment Forum". CRAI Library, Bilbao, 10 May.
- "Entrepreneur Day". Participation of Orkestra in the conference with the presentation: "Situación y tendencias de la actividad emprendedora". Iñaki Peña. Leioa, 11 May.

- Contrast Group of the European Commission Smart Specialization Platform. Participation of Orkestra. Mikel Navarro, Brussels (Belgium), 22 June.
- "Industrial Change and Smart Specialisation" Workshop, organized by the European Union Committee of the Regions. Participation of Orkestra, Mikel Navarro. Brussels (Belgium), 29 June.
- "Cómo pasar del benchmarking ingenuo al inteligente en el ámbito de la innovación" Workshop. (Orkestra-Garapen agreement). Maribel Guerrero and Graciela Kuechle. San Sebastián, 4 May.
- Closing Ceremony of the General Assembly of the Basque Association of Engineering and Consultancy (AVIC). Participation of Mikel Navarro, as speaker. Bilbao, 17 May.
- "Desarrollo Económico Local para la creación de bienes colectivos" (DEL) Andean Region. Participation of Orkestra in this FOMIN workshop. Susana Franco, Lima (Peru), 6-8 June.
- Red Innovanet. Participation of Orkestra. María José Aranguren, Amaia Azpiazu, Usue Lorenz. Gipuzkoa, Araba and Bizkaia 7, 8 and 23 June.
- Visit to Orkestra by the manager of the Innovation and Development Association of Rafaela, Argentina. San Sebastián, 27 June-1 July.
- Discussion Forum 2020. Participation of Orkestra in this forum promoted by the Provincial Council of Gipuzkoa. Mikel Navarro. San Sebastián, 2 June.
- "Un nuevo ICEX al servicio de las empresas". Participation of Orkestra in the round table "La pyme en el actual contexto del comercio mundial. El papel de los organismos oficiales de apoyo a la internacionalización de las empresas". Mikel Navarro. Madrid, 6 June.
- "Expert Workshop on Service Innovation" Workshop. Participation of Orkestra with the other institutions that are part of the project's international consortium. James Wilson. Brussels, Belgium, 8 June.
- Signing of the collaboration agreement between Orkestra and the National Technological University of Rafaela, Argentina. Argentina, 6 July.
- "El papel de la agencia en la diversificación y transformación del tejido productivo hacia actividades Mayor valor añadido" Workshop. (Orkestra-Garapen collaboration agreement). San Sebastián, 1 July.
- Memoria Socioeconómica de la CAPV 2010 del Consejo Económico y Social. Participation of Orkestra with an analysis of the Basque Country's innovation strategy. Mikel Navarro. Bilbao, 14 July.
- Workshop on local networks. (Orkestra-Garapen collaboration agreement). San Sebastián, 14 July.
- "Fomento del emprendimiento de alto potencial desde las agencias de desarrollo" Workshop. (Orkestra-Garapen collaboration agreement), San Sebastián, 20 July.

- "Academic Entrepreneurship Workshop". Organized by Orkestra. San Sebastián, 8-9 September.
- Visit to Agder Research (Orkestra-Agder Research collaboration agreement). Miren Larrea, Miren Estensoro and James Karlsen. Norway, 13-16 September.
- European Cluster Observatory-II. Meeting of representatives of the international consortium participating in the project. San Sebastián, 16 September.
- Exchange of experiences between Orkestra researchers and representatives of the Santa Fe, Argentina region competitiveness program. (Orkestra- National Technological University of Argentina collaboration agreement). San Sebastián, 13 September.
- Red Innovanet. Participation of Miren Larrea, María José Aranguren and Amaia Azpiazu. Gipuzkoa and Bizkaia Nodes, 22 and 27 September.
- "The British Electric Industry 1990-2010: the rise and demise of competition" Lecture. Given by Alex Henney. Bilbao, 29 September.
- "International Crecer+ Venture Contest Day". San Sebastián, 30 September.
- "Unconventional Gas Conference-Shale Gas". Organized by Orkestra. Bilbao, 2 October.
- Policy evaluation training for Orkestra members: Marian Diez (UPV/EHU); Federico Todeschini and María Antonieta Praera (Ivalua-Catalan Institute for Public Policy Evaluation); Eric Monnier (Eureval –Rimas Research Institute for Managing Sustainability); Michal Sedlako Rimas (Research Institute for Managing Sustainability). Orkestra, San Sebastián, 7 October-25 November.
- Red Innovanet. Participation of Miren Larrea, María José Aranguren and Amaia Azpiazu. Araba Node. 10 October.
- "El TAV en el País Vasco: Nuevas Oportunidades para el Turismo".
 Participation of Edurne Magro in this workshop framed within a project led by Basquetour and developed by the Basque Country Chambers of Commerce and the consulting firm Tangible. San Sebastián, 11 October.
- Presentation on the competitiveness of the Basque Country to a delegation from Croatia. Bilbao, 19 October.
- "Clusters in Global Value Chains: What is the Role of Innovation Systems?" Workshop. Organized by Orkestra. San Sebastián, 20 and 21 October.
- Contrast Group of the European Commission Smart Specialization Platform. Participation of Orkestra. Mikel Navarro, Brussels (Belgium), 27 October.
- Presentation on Orkestra to a delegation from the Western Region of Romania. San Sebastián, 27 October.

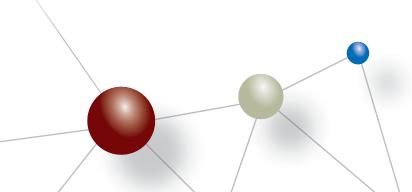
- EU-China Regional Policy Dialogue. Participation of María José
 Aranguren with an analysis of cluster systems in Europe to some 20
 Chinese delegates interested in references for policymaking. Berlin
 (Germany), 28 October.
- "Clusters and smart specialisation strategies: a policy perspective".
 Presentation by James Wilson at the "New Practices in Regional Innovation Policy towards Regionally Adapted Strategies" workshop, organized by the Regional Innovation Monitor (RIM) and the European Commission. Brussels (Belgium), 28 October.
- Regional Innovation Monitor Policy Workshop "New Practices in Regional Innovation Policy —towards Regionally Adapted Strategies", organized by Fraunhofer-ISI, Technolopolis and UNU-MERIT. Mikel Navarro, Brussels, Belgium, 28 October.
- Business Angels Crecer+ School. Day of training aimed at potential investors that are interested in investing in startups. San Sebastián, 2 November.
- "Critical Action Research". Presentation by Mikaela Vasstrom, researcher at Agder Research, to Orkestra researchers, within the framework of the Orkestra-Agder Research collaboration agreement. San Sebastián, 2 November.
- "Energía e Industria: Innovación y desarrollo tecnológico en el nuevo escenario energético" Seminar, organized by Orkestra and EVE, Bilbao, 10 and 11 November.
- "Crecer+ Investment Forum" Six startup projects presented to Business Angels Crecer+ (BAC+) Network investors. San Sebastián, 17 November.
- "What Drives Regional Competitiveness in Europe", Presentation by James Wilson, TCI Annual Global Conference. Auckland (New Zealand), 1 December.
- "Measurement and Evaluation". Participation of James Wilson as moderator at this roundtable of the TCI Annual Global Conference. Auckland (New Zealand), 1 December.
- The impact of REACH/CLP regulation on emerging technologies.
 Participation of Bart Kamp as group leader, on the subject of "Uptake—Market Penetration". DG Enterprise, European Commission.
 Brussels (Belgium), 5 December.

Instruction

...specialized, setting content, accrediting programs...

- Cómo elaborar un modelo de negocio. Tutoring Sessions. DBS EMBA program. Iñaki Peña, Bilbao, 14-15 January.
- Creación de empresas de base tecnológica. University of Barcelona Master's Degree Program, Barcelona, Iñaki Peña, 16-17 March.
- Entrepreneurial Decision Making and Action. MSc Entrepreneurship and Innovation for a Sustainable World. Graciela Kuechle. Nice, 21 March.
- Metodologías para fomentar la colaboración interempresarial y creación de redes locales. Orkestra-Garapen Agreement. Durango, 13 January, 1 March, and 17 March.
- Innovation, Growth and Competitiveness. 30-hour seminar within the framework of the Doctoral Program on Business Competitiveness and Economic Development.
- Estrategia para la competitividad. Análisis del entorno general del territorio y del entorno clúster. Course taught by María José Aranguren and Mikel Navarro. Programme for Leadership Development (PLD), Deusto Business School. San Sebastián, 25 and 26 February.
- MOC Course San Sebastián 2011. 11 March-17 June.
- Actividad emprendedora de base tecnológica. Course taught by Iñaki Peña, Graciela Kuechle and Maribel Guerrero in the Deusto Business School (DBS) Executive MBA. Bilbao, 3 and 4 June.
- Estrategias territoriales: competitividad, clúster e innovación.
 Course taught in the Master's Degree in Regional Development.
 National Technological University. María José Aranguren and Miren Larrea. Rafaela (Argentina), 14 June.
- Metodologías para fomentar la colaboración interempresarial y creación de redes locales. Orkestra-Garapen Agreement. Miren Larrea, Amaia Azpiazu and Miren Estensoro. Durango, 5 May.
- Elaboración de mapeos clúster. Orkestra-Garapen Agreement.
 James Wilson and Amaia Azpiazu. Durango, 27 June.
- Sesiones de tutoría y de defensa de proyectos EMBA y MBA de Deusto Business School. Iñaki Peña, Graciela Kuechle, Maribel Guerrero, José Luis González and Asier Rufino. January-July.
- Diversificación y transformación del tejido productivo hacia actividades Mayor valor añadido. Orkestra- Garapen collaboration agreement. Mikel Navarro and María José Aranguren. San Sebastián, 1 July.
- Managing the Growing Business. Coaching sessions, Crecer+ Emprendedores. Bilbao, 12 July.

- Looking Smart with Investors and Terms Sheet Negotiation. Coaching sessions, Crecer+ Emprendedores. Bilbao 29 September.
- Competitividad, territorio, innovación y clústeres. Course taught by Mikel Navarro for CICtourGUNE, within the framework of its program "Spain and its Regions Exchange Knowledge with Antioquia (ERICA)". San Sebastián, 1 September.
- Energy and Competitiveness: Gas, Networks and Renewable Energy Course. Organized by Orkestra. Bilbao, October 2011-March 2012.
- Elaboración de mapeos clúster. Orkestra- Garapen collaboration agreement. Durango, 15 September.
- "Subvenciones, innovación y competitividad. Prácticas de gestión en cooperativas industriales del País Vasco". Participation of María José Aranguren as member of the examination panel for this thesis defended at Mondragon Unibertsitatea. Oñate, 28 October
- Case study methodology. Seminar on Scientific Research Methodology, taught by Davide Parrilli. Doctorate Course on Business Competitiveness and Economic Development. San Sebastián, 29 October.
- Economía española y mundial. Participation of Mikel Navarro as professor, Deusto Business School, University of Deusto. San Sebastián, October.
- Microeconomía. Participation of María José Aranguren as professor. Deusto Business School, University of Deusto. San Sebastián, November-December.
- Master in Globalization and Development. Participation of Davide Parrilli as external examiner. Institute of Development Studies. University of Sussex. Sussex (United Kingdom), 4 November.
- Elaboración de mapeos clúster. Orkestra-Garapen Agreement.
 James Wilson, Amaia Azpiazu, Durango, 2 November.
- Plan de Marketing. Course taught by María Larraza in the Deusto and EITB Master's Degree in Audiovisual, Corporate and Institutional Communication Management, 24 November.
- Investigación en la Creación de Empresas. Course taught by Iñaki Peña in the Economics and Business Administration Doctoral program, University of Panama. Panama City (Panama), 5-9 December
- MOC Network Cluster Research Workshop. Participation of José
 Luis Curbelo, Mikel Navarro and Bart Kamp. Harvard Business
 School, Boston (U.S.A.), 11 December.
- 2011 MOC Affiliate Faculty Workshop. Participation of José Luis Curbelo, Mikel Navarro and Bart Kamp. Harvard Business School, Boston (U.S.A.), 12-13 December.



3.3. Newspaper Library

In fulfilling its essential function of generating and disseminating ideas that prove useful for the forming of public opinion, the Institute reached considerable media presence in 2011.

Articles written by Institute members for newspapers and industry magazines

- ÁLVAREZ, E. (2011, 20 February). "Emiratos árabes unidos: hidrocarburos y renovables". El Correo (infoempleo supplement).
- CURBELO, J. L.; MURCIEGO, A. (2011, 30 March). "Productividad y cambio demográfico en el País Vasco". El Correo, p. 32.
- CURBELO, J. L.; MURCIEGO, A. (2011, 30 March). "Productividad y cambio demográfico en el País Vasco". Diario Vasco, p. 22.
- CURBELO, J. L.; RABELLOTTI, R. (2011, 9 April). "La relevante y compleja inversión china en Europa". Expansión, p. 42.
- NAVARRO, M. (2011, 10 April). "Berrikuntzako "benchmarkina" Euskal Autonomi Erkidegoan". Berria, p. 26.
- CURBELO, J. L. (2011, 1-15 July). "¿Emprender? Del '¡Qué inventen ellos!' al 'Yes WE can'". Estrategia empresarial, p. 2.
- ARANGUREN, M. J. (2011, 3 July). "Lurralde-lehiakortasunerako estrategia". Berria, p. 26.
- CURBELO, J. L. (2011, 4 July). "Ante la complejidad". Diario Vasco, p. 18.
- CURBELO, J. L. (2011, 4 July). "La competitividad del País Vasco".
 El Correo, p. 26.
- CURBELO, J. L. (2011, 4 July). "La globalidad de la inteligencia en el mundo". El Economista, p. 32.
- CURBELO, J. L.; FRANCO, S. (2011, 22 August). "Retos para la competitividad Vasca". El Correo, p. 39.
- PEÑA, I. (2011, 25 September). "Ekin ezinik, Euskal Baleari begira". Berria, p. 26.
- CURBELO, J. L.; KAMP, B. (2011, 19 December): "Tamaño empresarial, competitividad y capacidad innovadora". El Economista, p. 5.

Press Articles about Orkestra

- Europapress.es, 26-Jan-2011. "Orkestra ofrece un curso diseñado por Harvard para mejorar la competitividad de las empresas y territorios".
- Business.es, 01-Feb-2011. p. 3. "Orkestra impulsa en el País Vasco la investigación-acción".
- Deia, 04-Feb-2011. p. 40. "Orkestra crea el "ecosistema emprendedor""
- Diario Vasco, 04-Feb-2011. p. 49. "Orkestra impulsa una red de inversores para apoyar a los emprendedores de Gipuzkoa".
- El País, 04-Feb-2011. p. 4. "Orkestra impulsa un ecosistema inversor vasco".
- Noticias de Gipuzkoa, 04-Feb-2011. p. 27. "Nace el club para inversores y emprendedores Business Angels Crecer+".
- Inverpro.org, 07-Feb-2011. "Orkestra lanza el club de Business Angels Crecer+ en el País Vasco".
- Aclima, 08-Feb-2011. "Orkestra impulsa una red de inversores para apoyar a los emprendedores de Gipuzkoa".
- Club de marketing de Navarra, 09-Feb-2011. "Orkestra-Instituto Vasco de Competitividad ofrecerá una nueva edición del curso Microeconomics of Competitiveness MOC, en San Sebastián".
- El Economista, 09-Feb-2011. p. 8. "La competitividad cuando se mueve en territorios y ciudades".
- Estrategia Empresarial, 1/15-Feb-2011. p. 37. "Orkestra impartirá a partir de marzo un nuevo curso MOC de competitividad".
- El País, 13-Feb-2011, p. 5. "Un Silicon Valley cercano", Iñaki Peña, Head of Orkestra's Entrepreneurship Area.
- Estrategia Empresarial, 16/18-Feb-2011. p. 35. "Nuestro objetivo final es obtener un rendimiento social", Iñaki Peña, Head of Orkestra's Entrepreneurship Area.
- Emprendedores, 21-Feb-2011. "Club de competitividad en Euskadi".
- Berria, 27-Feb-2011. p. 21. "Produktiboa, izan edo ez izan". Mikel Navarro, Senior Researcher at Orkestra-Basque Institute of Competitiveness.
- Noticias de Gipuzkoa, 06-Mar-2011. "Gipuzkoa Aurrera detecta que el conocimiento "no fluye como debiera".
- Diario Vasco, 07-Mar-2011. p. 37. "Expertos apuestan en Oxford por fortalecer el sistema de innovación de Gipuzkoa".
- EFE, 10-Mar-2011. "Una iniciativa de Deusto media entre inversores y proyectos innovadores".
- El País, 10-Mar-2011. p. 4. "Músicos que tocan en "Orkestra".

- El Correo, 13-Mar-2011. p. 19. "Orkestra se encomienda a los ánqeles".
- Deia, 23-Mar-2011. p. 37. "Fija indicadores para medir el impacto de la innovación en Euskadi".
- Diario Vasco, 23-Mar-2011. p. 44. "La "endogamia" de la innovación vasca es una de sus mayores debilidades".
- El Mundo, 23-Mar-2011. p. 12. "Endogamia en la innovación".
- El País, 23-Mar-2011. P.3. "Innovación sin autocomplacencia".
- Finanzas.com, 23-Mar-2011. "Innobasque y Orkestra publican un libro con indicadores para medir el impacto de la innovación en la economía vasca".
- Noticias de Gipuzkoa, 23-Mar-2011. p. 28. "Innobasque y Orkestra presentan nuevos indicadores para medir el impacto de la innovación en la economía vasca".
- Economista, 25-Mar-2011. p. 8. "Recuperar al inversor que apoye a la empresa con miras", José Luis Curbelo, General Manager of the Basque Institute of Competitiveness.
- El País, 26-Mar-2011. p. 6. "Sopa nauryz kozhé en Deusto".
- Noticias de Gipuzkoa, 28-Mar-2011. "Hay que pasar de la cultura del taller a la innovación", José Luis Curbelo, General Manager of the Basque Institute of Competitiveness.
- Empresas Euskadi, April-2011. p. 34. "Orkestra presenta el Club de Business Angels Crecer+".
- Empresa XXI, 01-Apr-2011. p. 29. "Orkestra une a inversores privados y emprendedores en la plataforma Crecer+".
- ABC.es, 01-Apr-2011. "Expertos consideran preciso "repensar" el modelo energético actual".
- Finanzas.com, 01-Apr-2011. "Un experto pide consenso político en materia energética y dice que la energía debe ser "segura, limpia y barata".
- Diario Vasco, 03-Apr-2011. p. 56. "Las energías renovables, una apuesta "irrenunciable" para ganar competitividad".
- Empresaexterior.com, 03-Apr-2011. "Orkestra lanza el club Business Angels Crecer+ para impulsar el ecosistema emprendedor en la CAPV".
- Finanzas.com, 03-Apr-2011. "Orkestra presenta el Club de Business Angel Crecer+ como punto de encuentro entre inversores y emprendedores vascos".
- Adn.es, 04-Apr-2011. "Expertos consideran preciso "repensar" el modelo energético actual".
- Noticias de Gipuzkoa, 22-Apr-2011. p. 22. "El talón de Aquiles de la innovación".
- El Confidencial, 13-May-2011. "Barcelona se lleva a todos los inmigrantes de alta cualificación que llegan a España".













3.3. Newspaper Library

- Noticias de Gipuzkoa, 03-Jun-2011. p. 30. "El foro de debate de Gipuzkoa 2020 nace como expresión de nuevas ideas frente a la crisis".
- El País, 05-Jun-2011. p. 14. "Una energía más limpia no puede ser ahora barata", Eloy Álvarez, Head of the Chair of Energy.
- Diario Vasco, 12-Jun-2011. p. 58. "Unidos para forjar emprendedores", Iñaki Peña, Head of Orkestra's Entrepreneurship Area.
- Expansión, 30-Jun-2011. p. 12. "Ignacio Mª Echeberria, nuevo presidente"
- Noticias de Gipuzkoa, 06-Jul-2011. p. 3. "La competitividad desde la demografía".
- El Correo, 06-Jul-2011. p. 33. "Euskadi necesitará trabajadores en 2020, augura el Instituto Vasco de Competitividad".
- Qué! Nervión, 06-Jul-2011. p. 4. "El envejecimiento de la población vasca obligará a retrasar la edad de jubilación".
- Berria, 06-Jul-2011. p. 3. "Erretiroa atzeratu, krisi demografikoari aurre egiteko".
- Deia, 06-Jul-2011. p. 31. "Euskadi camina hacia un mercado con menos trabajadores que empleos".
- El Diario Vasco, 06-Jul-2011. p. 40. "La caída de la población activa vasca obligará a retrasar la jubilación en 2020".
- El Mundo, 06-Jul-2011. p. 10. "Euskadi tendrá en diez años menos empleados que puestos de trabajo".
- El País, 06-Jul-2011. p. 5. "Una economía vasca más competitiva pasa por atraer capitales y personas".
- Expansión, 06-Jul-2011. p. 11. "La población activa será insuficiente en diez años para cubrir empleo".
- Gara, 06-Jul-2011. p. 24. "El instituto Orkestra lamenta la baja inversión extranjera en la CAV en los últimos 20 años".
- Noticias de Gipuzkoa, 06-Jul-2011. p. 50. "Una crisis demográfica "dramática" obligará en 2020 a retrasar la edad de jubilación y a atraer talento".
- Noticias de Gipuzkoa, 06-Jul-2011. p. 50. "El "seguidismo" de las empresas provocan un valor limitado de la innovación en Euskadi".
- Cybereuskadi, 06-Jul-2011. "En nueve años Euskadi perderá el 13% de su población activa".
- Terra.es, 06-Jul-2011. "España conferencia competitividad"
- El Diario Vasco, 07-Jul-2011. p. 40-41. "López plantea eliminar la bonificación por EPSV y crear un nuevo fondo de pensiones".

- El Diario Vasco, 07-Jul-2011. "Si trabajamos juntos, somos imparables".
- El País, 07-Jul-2011. p. 3. "El PSE colocará las reformas de López como eje de su acción parlamentaria".
- Finanzas.com, 07-Jul-2011. "López dice que Euskadi está empezando a ser líder económico de España y abala el "ejercicio de corresponsabilidad".
- El Correo, 10-Jul-2011. "Economía Vasca: la nueva complejidad".
- Diario de Noticias de Álava, 12-Jul-2011. p. 33. "El futuro de Euskadi pasa por coordinar sectores, como la biotecnología con la máquina herramienta", Mari Jose Aranguren, Head of Clusters, Regional Development and Innovation at Orkestra.
- Estrategia Empresarial, 16 July/31 August 2011. p. 2. "Competitividad demográfica".
- Estrategia Empresarial, 16 July/31 August 2011. p. 35. "La competitividad vasca exige productos más sofisticados y una mayor apertura".
- Estrategia Empresarial, 16 July/31 August 2011. p. 35. "Euskadi, sede del congreso mundial de clusters".
- Noticias de Gipuzkoa, 17-Jul-2011. p. 56. "El futuro de Euskadi pasa por coordinar sectores, como la biotecnología con la máquina herramienta", Mari José Aranguren, Head of Clusters, Regional Development and Innovation at Orkestra.
- Deia, 18-Jul-2011. p. 15. "Abuelos sin nietos".
- El País, 20-Jul-2011. p. 8. "Origen y legado del mar".
- El Correo, 25-Sep-2011. p. 61. "Jornada sobre Gas no convencional: Shale Gas".
- Finanzas.com, 03-Oct-2011. "Ocho empresas emprendedoras compiten en la jornada de Orkestra por su expansión internacional".
- El Confidencial, 04-Oct-2011. "Doocuments, mejor empresa para invertir según el Orkestra Venture".
- El País, 04-Oct-2011. p. 5. "Ocho empresas emprendedoras compiten por su expansión internacional".
- Noticias de Gipuzkoa, 04-Oct-2011. p. 26. "Premio a las empresas emprendedoras".
- Europapress.es, 05-Oct-2011. "El Consejo Asesor del lehendakari cree que hay un mayor ahorro potencial en las "ineficiencias" que en las duplicidades".
- El Correo, 06-Oct-2011. p. 42. "Un centenar de agentes económicos y empresas viajarán con López a EE UU".

- El Mundo, 06-Oct-2011. p. 12. López visitará la "Zona Cero" en un viaje para potenciar a las empresas vascas.
- Estrategia Empresarial, 16/31-Oct-2011. p. 33. "Empresas emprendedoras compiten por su expansión en una jornada de Orkestra".
- El País, 23-Oct-2011. p. 4. "La marca Euskadi tiene vía libre".
- Deia, 25-Oct-2011. p. 3. "I+D tecnológico en el nuevo escenario energético".
- El País, 07-Nov-2011. p. 6. "El BEC acoge un seminario sobre energía e industria".
- Europapress.es, 07-Nov-2011. "El BEC de Barakaldo (Bizkaia) acogerá los días 10 y 11 un seminario sobre energía e industria".
- ABC.es, 10-Nov-2011. "Hernani pide ambición a las empresas para afrontar el momento de transición".
- El Mundo, 10-Nov-2011. "La industria vasca reduce su consumo energético en 650.000 tep en diez años".
- La Vanguardia, 10-Nov-2011. "Expertos internacionales debaten sobre la influencia de la situación geopolítica en la industria y el sector energético".
- Diario Vasco, 11-Nov-2011. p. 49. "La industria consume menos energía"
- El Correo, 11-Nov-2011. p. 49. "Ahorro energético en la industria vasca".
- El Mundo, 11-Nov-2011. p. 11. "Industria aboga por el gas y las renovables como pilares energéticos".
- El País, 11-Nov-2011. p. 5. "Una apuesta por convertir Euskadi en un referente mundial de desarrollo energético".
- Noticias de Gipuzkoa, 11-Nov-2011. p. 34. "La industria vasca ha reducido su consumo en 655.000 Tep en diez años".
- Expansión, 11-Nov-2011. p. 24. "La industria reduce su consumo energético".
- Estrategia Empresarial, 16/30-Nov-2011. p. 8. "Hay que alentar la oportunidad de las redes inteligentes".
- El Diario Vasco, 20-Nov-2011. p. 46. "Encuentro entre emprendedores e inversores".
- Noticias de Gipuzkoa, 27-Nov-2011. p. 28. "Hay que seguir con las ayudas a las empresas para I+D y replantearse continuamente sus resultados", Edurne Magro, Researcher at Orkestra-Basque Institute of Competitiveness.

3.4. The Team

Orkestra is a living, breathing project with an open and international nature. The Institute's team members are the greatest exponents of the project: a dynamic, multidisciplinary team with an increasingly multicultural background, with professionals from Argentina, Australia, Azerbaijan, Colombia, Spain, Greece, Holland, Italy, Mexico, Kazakhstan, Norway, the United Kingdom, Uruguay, and Venezuela. In addition to the professionals listed below, Xabier Alberdi, Javier Miner, Lourdes Moreno, Roberta Rabellotti, Asier Rufino, and Lorea Yarzabal collaborate with the Institute.

Senior Researcher Maribel Guerrero, PhD Postdoc Territory, Innovation, and Clusters Iñaki Peña, PhD Jose Luis González Head of Department Miren Larrea, PhD PhD candidate- Researcher Senior Researcher James Ralph James Karlsen, PhD Mario Davide Parrilli, PhD Karlygash Altayeva Mikel Navarro, PhD Senior Researcher Senior Researcher Wilson, PhD Amaia Azpiazu PhD candidate-Researcher Senior Researcher Senior Researcher Research Facilitator General Management Susana Franco, PhD Researcher María José José Luis Curbelo, PhD Aranguren, PhD General Manager Maria Cecilia Tilano Head of Edurne Magro, PhD Usue Lorenz PhD candidate-Researcher Department Researcher Research Ainhoa Arrona Miren Estensoro Luis Silveira Facilitator Research Facilitator PhD candidate-Researcher PhD candidate-Researcher Energy Etorne Ugalde General Services Eloy Alvarez Pelegry, PhD Head of Depatment Ana Carmen Diaz, PhD Researcher Raquel Vazquez Nasirov Shahriyar Idoia Egaña Information Systems PhD candidate-Researcher Carme Vallverdu Unai Castro, PhD General Services General Services Research Facilitator Asier Murciego Ibon Gil de San Vicente Information Deputy General Manager Systems Ilias Tsagas, PhD Aitziber Barrio Researcher Laura Oreja General Services General Services Strategy Cristina Molina Henar Alcalde, PhD Patricia Canto Instruction Researcher Communication-Publications Programs Lorea Larrabeiti Aitziber Elola, PhD Communication-Media Researcher Bart Kamp, PhD Maria Larraza Head of Deparment PhD candidate-Researcher

Entrepreneurship

Graciela Küechle, PhD

