

SC4C Gaia

Smart Capacities for Cities

CATALOGUE OF PRODUCTS AND SERVICES





What is SC4C GAIA?

The aim of SC4C-Smart Capacities for Cities- GAIA, is to share a comprehensive range of solutions and services according to the principles of innovation, economic and environmental sustainability, that help to obtain greater efficiency, comfort and interactivity for players involved in Smart Cities or Smart Environments (citizens, government, companies, infrastructure, etc.).

Electronics, Information and Communication Technologies play a crucial role in the evolution of these environments towards sustainable, comfortable, interactive and interconnected spaces, enhancing the ability to create, collect, process and transform information in order to make their processes and services better and more efficient, enabling to enhance quality of life through the efficient use of customised resources and services.

All in all, this model promotes Smart Cities to make use of Electronics and ICTs to generate a more safer, smarter and efficient environment for people, reducing costs and saving energy, improving the services provided and the quality of life, and reducing the environmental footprint, all this with the help of innovation and a low carbon economy.



What are Smart Cities?

We define Smart City as a city which makes use of ICT's to manage infrastructures more efficiently, offer services provided rationally, provide a higher quality of service to citizens, wherein all its players (users, companies and Government) interact with each other to evolve and improve their activity. This interoperability requires the support of smart networks and platforms. It is also a city committed to its surroundings, both environmental and in terms of cultural and historical elements.

In this context, a Smart City is a complex system, an "ecosystem" in which multiple players are involved, wherein many closely linked processes coexist that enable new models of business services, relationship with the surroundings, and provides an excellent platform for innovation and creativity of people.



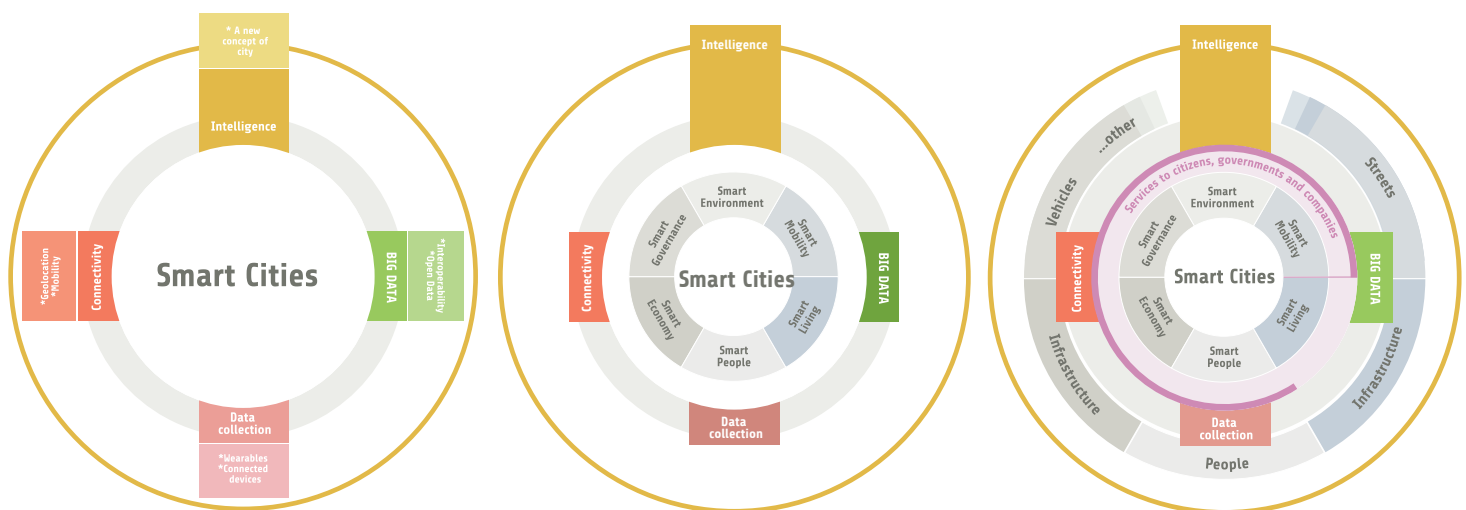
Value chain of Smart Cities

STEP 1: Creation of necessary Technology Base and Infrastructure. Structural Areas of Opportunity.

- Data collection (people, buildings, streets, vehicles, infrastructure, ...).
- Transmission of information to complex storage systems BIG DATA.
- Multi-directional communication between devices, systems, people, ...
- Channelling information to data intelligence (systems and applications, data integration, alert systems, decision making aids, ...).

STEP 2: Identification of different lines or fields of action.

STEP 3: Range of Smart Products, Services and Solutions to citizens, governments, companies and players involved.



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Customer	Ayuntamientos GIPUZKOA
Country	Spain
Start date	2018
End date	Actualidad

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Start date	-
End date	-

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HISPAVISTA LABS A.I.E.

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Country	Spain
Start date	2018
End date	Actualidad

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Semantic Systems

Area	SMART ENVIRONMENT
Sub-area	WASTE, CONTAMINATED SOILS, AIR QUALITY, CLIMATE CHANGE MITIGATION, RISK MANAGEMENT
Company	Semantic Systems
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zip code	48160
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Province	Bizkaia
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Email	marketing@semantic-systems.com
Customer	European South West Regional Cooperation Program (SUDOE). Spain, France and Portugal Programs.
Country	Spain
Start date	01/06/2013
End date	31/12/2014

URBILCA Life Cycle impact evaluation and energetic efficiency improvement in urban areas

Life Cycle Analysis as an evaluation methodology for the design and planning of new areas and for rehabilitation or refurbishment of existing areas, spreading the eco-neighbourhood and eco-cities concepts.

This international study has been developed in the SUDOE region due to the similar urbanistic models and climatic conditions of Spain, Portugal and the South of France. The results of the project will enable the evaluation of the sustainability level of the different urban areas typologies through all the phases of the lifespan of any building in those regions. The project developed common solutions for the construction sector sustainable development. With the results of the project it will be possible to establish recommendations for the energetic efficiency related regulatory framework and urban areas environmental and energetic impact related issues.



Semantic Systems

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Customer	Ayuntamiento de Barakaldo
Country	Spain
Start date	01/03/2012
End date	01/03/2014

ECODIS Technology development for the generation, distribution and efficient management of energy flows in urban-industrial environments and application in the transformation of cities towards a low carbon city model

The project has been developed in consortium with strategic partners on the Basque Country. The project developed technology for the energy generation, distribution and management to minimize the energy consumption in a city from an integrated system. Semantic Systems applied its software engineering expertise to contribute in the carbon footprint and emissions of greenhouse gases reduction from a Life Cycle perspective.



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Customer	Ministerio Economía y Competitividad
Country	Spain
Start date	01/03/2011
End date	31/12/2014

SOFIAS Integrated Functions Software for a Sustainable Architecture (SOFIA: Software de Funciones Integradas para una Arquitectura Sostenible)

The SOFIAS Project has been developed in consortium within the INNFACTO program of the Ministry of Economy and Competitiveness. The result of the project is a software to assist the ecodesign in rehabilitation or new construction projects for either residential, industrial, commercial or office use. The project addresses both private (companies/professionals) and public sector (quality assurance and law compliance at regional or country levels).

- The cloud based software, is always available and easy to use. It will help the users with accurate information on the environmental impacts of their architectural projects through its whole life cycle.
- Database with environmental reference values of construction sector products and processes. The project complies the environmental product declarations (EPD) as defined in the ISO 14025 standard. This EDPs are used by companies worldwide to provide products quantitative information based on the Life Cycle Analysis methodology.
- Life cycle Analysis application to obtain information on emissions (carbon footprint, acid rain, ozone depletion, abiotic resource depletion, eutrophication), waste and recycling.
- CO2 emissions qualification system, comparing against the reference building and different comparative functions. It assigns a qualification to the project to help the architect establish strategies to improve the design or materials.
- Realistic and affordable qualification system to measure the impact of the buildings in their whole life cycle using Life Cycle Analysis methodology
- LIDER-CALENER projects import



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Country	Germany
Start date	01/02/2010
End date	31/05/2013

3EHOUSE

Energy monitoring and control of electricity consumption in pilot scheme: Langenfeld (Germany)



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Country	United Kingdom
Start date	01/03/2012
End date	31/05/2013

3EHOUSE

Energy monitoring and control of electricity consumption in pilot scheme: Bristol (United Kingdom)



SGSmap

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Web page	http://www.sgsmap.com/
Email	sgsmap@sgsmap.com
Customer	Ayuntamiento de Donostia-San Sebastián
Country	Spain
Start date	2000
End date	2014

GIS solutions to support the management of Donostia-San Sebastián City Council

Apart from the analysis, design and complete development of a support system for managing the different departments of Donostia – San Sebastián City Council, SGSmap has supplied software products, uploaded map and thematic data, installed the system in City Council premises, trained users, and provided ongoing technical support for the operation, maintenance, functional expansion and technological development of the system.

To achieve this, it has implemented numerous applications in different settings (desktop, web):

- Public services: water, sanitation, traffic lights and street lighting
- Applications and procedures for uploading information onto the GIS environment from the mapping environment (AutoCAD Map)
- Guided information access via street plans
- Construction and project management (ditches and scaffolding)
- Information management for the PGOU (independent project of the General Plan for Urban Planning department)
- Information management for the Urban Economic Observatory (Development Agency)
- Information management for the mobility department: vehicle access, horizontal and vertical signs
- Information management for municipal registers
- Information management for parks and gardens
- Information management for street-side terraces
- Inventory of street furniture associated with municipal urban transport services



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SGSmap

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Customer	Ayuntamiento de Zarautz
Country	Spain
Start date	2007
End date	Actualidad

GIS solutions to support the management of the street and traffic lighting network

SGSmap has been awarded a public tender announced by the Department of Technical Services of Zarautz City Council for the contracting of works for "Development of GIS tools for managing the furniture and the municipal supply networks, street lighting and street furniture".

Apart from the development of GIS tools for managing the network and furniture inventories, as part of this contract it has undertaken the complete geographical integration of these tools with the incident management application, an application that manages information about Work Orders (WOs) associated with different, previously classified, types of incident.



SGSmap

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Customer	Ayuntamiento de Orio
Country	Spain
Start date	1996
End date	1998

GIS solutions to support the management of the supply and sanitation network

SGSmap has extensive experience in support projects for managing the supply and sanitation networks of Public Administrations. In the different projects it has carried out for various Administrations it has provided a wide range of functions for uploading, maintaining and analysing information:

- Basic functions for maintaining information on the entities included in the Sanitation Data Model: connections, manholes, sluices, tanks, sewage water treatment plants, pumps, etc.
- Guided access and information search functions
- Generation of basic reports: inventories and accounts for network elements
- Network information quality control applications
- Plotting module
- Development of a GIS interface with the control system (SCADA)
- Analytical applications: longitudinal profile, generation of catchment areas, 3D analysis



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Country	Spain
Start date	2005
End date	2008

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Country	Spain
Start date	2000
End date	2001

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Country	Spain
Start date	2001
End date	2002

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Email	sgsmap@sgsmap.com
Customer	Ayuntamiento de Zarautz
Country	Spain
Start date	2007
End date	Actualidad

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Country	Spain
Start date	2007
End date	2014

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Email	abernalg@indra.es
Customer	BBVA
Country	Paraguay
Start date	01/07/2008
End date	Actualidad

LEED Certification

Encompasses different areas. We have carried out a study into landscaping, runoff management, urban heat island management, waste management, management and monitoring of the environmental quality inside buildings and building cooling system management. Within water management, water cycle analysis of buildings and efficient irrigation management and use of recycled water. In energy efficiency, study of building components for energy optimisation, monitoring and management of the energy consumption of buildings, monitoring building launch and study of thermal comfort



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Customer	Cadena Hotelera Lopesan
Country	Spain
Start date	10/2009
End date	12/2009

PRISMA Application for the Maintenance Management

Implementation of the PRISMA application for the maintenance management of the chain's hotels, including monitoring energy consumption



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Customer	Consortio de Aguas de Pamplona
Country	Spain
Start date	03/2013
End date	07/2013

PRISMA Application for the Maintenance Management

Implementation of the PRISMA application for the maintenance management of the different plants and sewage system and distribution



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Customer	Servicios de Txingudi
Country	Spain
Start date	05/2008
End date	09/2008

PRISMA Application for the Maintenance Management

Implementation of the PRISMA application for the maintenance management of the different plants and sewage system and distribution



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Customer	Consortio de Aguas de Bizkaia
Country	Spain
Start date	02/2004
End date	05/2004

PRISMA Application for the Maintenance Management

Implementation of the PRISMA application for the maintenance management of the different plants and sewage system and distribution



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Customer	Plantas de Tratamiento RSU Ecoparc. Barcelona
Country	Spain
Start date	01/2010
End date	06/2010

PRISMA Application for the Maintenance Management

Implementation of the PRISMA application for the maintenance management of all plant facilities



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Customer	Planta de Tratamiento RSU Los Hornillos. Valencia
Country	Spain
Start date	04/2011
End date	07/2011

PRISMA Application for the Maintenance Management

Implementation of the PRISMA application for the maintenance management of all plant facilities



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Email	fsaenz@syslan.es
Customer	Bosch Rexroth/Fomento San Sebastián
Country	Spain
Start date	04/2010
End date	08/2011

Project for Real-Time Capture and Treatment of Information in Public Buildings. Bestenergy European Project

Cloud-based platform (Capture + Treatment + Communication Protocol) for the transfer and real-time processing of information distributed over multiple buildings, captured through sensors of various kinds (energy, access, water, flows, etc.). Syslan's suite of data acquisition devices has various low power sensors, designed to be used in energy monitoring environments or environments in which energy consumption is particularly delicate. Their low consumption means they can be powered by PV solar and similar energy sources. These energy monitoring solutions can be integrated with other products, such as Syslan's Industrial Cloud system, the SAT Proactive system, or factory solutions, adding energy management to their range of features. More information at: <http://www.cyril.es/energy-solutions>



ZIV Metering

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Email	medida@ziv.es
Customer	Iberdrola/EVE
Country	Spain
Start date	01/2012
End date	Previsión 12/2015

Bidelek Sareak

Supply of monitoring and automation equipment for the low and medium voltage distribution network, including smart meters and communications infrastructure



Servicios de Tecnología
de la información

Odei

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Province	Álava
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Email	amaias@odei.es
Customer	Vertedero de Gardelegi. Vitoria-Gasteiz/Verter Recycling, S.L. Vertedero Autorizado de Residuos. Zaldibar
Country	Spain
Start date	09/2010
End date	02/2012

Web Application for Landfill Activity Management

Web application for landfill management (intake, customers, accounting, etc.), management of waste analyses, management of intake and authorizations, monitoring and control of the waste deposited in the landfill, and integration with the system IKS-eeM (Integrated Environmental Information Management System of the Department for the Environment, Regional Planning, Agriculture and Fisheries of the Basque Government)



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Province	Álava
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Email	amaias@odei.es
Customer	Departamento de Medio Ambiente y Política Territorial-Gobierno Vasco
Country	Spain
Start date	03/2008
End date	03/2012

Information System for Management and Publication of Data from Air Quality Network

Information system for managing and publishing data from the Air Quality Network of the Department for the Environment and Regional Policy



Servicios de Tecnología
de la información

Odei

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Email	amaias@odei.es
Customer	Departamento de Medio Ambiente y Política Territorial-Gobierno Vasco
Country	Spain
Start date	11/2012
End date	Actualidad

Data Warehouse Information System, Data Marts and Environmental Scorecard for the Capture, Analysis and Exploitation of Environmental Data

Data Warehouse Information system, Data Mart and environmental scorecard for the collection, analysis and use of environmental data from the Environment Department of the Department for the Environment, Regional Planning, Agriculture and Fisheries of the Basque Government. The system covers important objectives such as:

- To understand the situation of environmental protection and improvement, biodiversity and natural heritage as well as its development in each of the necessary aspects.
- To centralize and standardize information from different sources, having shared and public tools to provide and use this information.
- To provide a personalised vision oriented towards the 3 management benchmarks: management (strategic vision), civil servants (perception of management) and environmental agents (customer perception).
- To generate greater interaction between the Department's staff, the Government and Environment Stakeholders.
- To improve the motivation and efficiency of civil servants by providing indicators and measurement systems at the management level.
- To achieve a European orientation towards SEIS and its philosophy of decentralized aggregation of information through the online provision of information for people and systems.



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Indra

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	Indra
Address	Ribera de Axpe, 11 - Bloques D1 y D2
zip code	48950
Town	Erandio
Province	Vizcaya
Web page	http://www.indracompany.com
Email	abernalg@indra.es
Customer	ARTEMIS/CDTI
Country	Spain
Start date	01/02/2013
End date	01/02/2016

ARROWHEAD

The aim of this project is to obtain data by installing different sensors to record energy, onsite activity, etc. through the use of various technologies and communication protocols and real-time monitoring and management of energy consumption



indra

Indra

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	Indra
Address	Ribera de Axpe, 11 - Bloques D1 y D2
zip code	48950
Town	Erandio
Province	Vizcaya
Web page	http://www.indracompany.com
Email	abernalg@indra.es
Customer	Banco Mundial EC
Country	Spain
Start date	01/02/2010
End date	31/01/2012

3EHOUSE

Energy monitoring and control of electricity consumption in pilot scheme: San Cugat del Valles (Spain)



indra

Indra

Area	SMART ENVIRONMENT
Sub-area	WASTE, CONTAMINATED SOILS, AIR QUALITY, CLIMATE CHANGE MITIGATION, RISK MANAGEMENT
Company	Indra
Address	Ribera de Axpe, 11 - Bloques D1 y D2
zip code	48950
Town	Erandio
Province	Vizcaya
Web page	http://www.indracompany.com
Email	abernalg@indra.es
Customer	Google
Country	Spain
Start date	01/04/2012
End date	Actualidad

LEED Certification

Encompasses different areas. We have carried out a study into landscaping, runoff management, urban heat island management, waste management, management and monitoring of the environmental quality inside buildings and building cooling system management. Within water management, water cycle analysis of buildings and efficient irrigation management and use of recycled water. In energy efficiency, study of building components for energy optimisation, monitoring and management of the energy consumption of buildings, monitoring building launch and study of thermal comfort



indra

Indra

Area	SMART ENVIRONMENT
Sub-area	WASTE, CONTAMINATED SOILS, AIR QUALITY, CLIMATE CHANGE MITIGATION, RISK MANAGEMENT
Company	Indra
Address	Ribera de Axpe, 11 - Bloques D1 y D2
zip code	48950
Town	Erandio
Province	Vizcaya
Web page	http://www.indracompany.com
Email	abernalg@indra.es
Customer	BBVA
Country	Spain
Start date	01/05/2010
End date	Actualidad

LEED Certification

Encompasses different areas. We have carried out a study into landscaping, runoff management, urban heat island management, waste management, management and monitoring of the environmental quality inside buildings and building cooling system management. Within water management, water cycle analysis of buildings and efficient irrigation management and use of recycled water. In energy efficiency, study of building components for energy optimisation, monitoring and management of the energy consumption of buildings, monitoring building launch and study of thermal comfort



Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	Smart Meter Brasil
Country	Brasil
Start date	09/2012
End date	Actualidad

Smart Metering Gas. AMI Remote Reading System in Brasil

Design and installation of an AMI remote gas reading system



Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	Gas Natural
Country	Spain
Start date	03/2009
End date	06/2014

Smart Metering Gas. AMI Remote Reading System in Torrelavega

Design and installation of a pilot system for gas meters



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	RESOPRE
Country	Portugal
Start date	11/2012
End date	Actualidad

Smart Metering Agua. AMI Remote Reading System in Cascais

Design and installation of an AMI remote reading system in the Portuguese town of Cascais



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	Aqualia Portugal
Country	Portugal
Start date	02/2009
End date	05/2009

Smart Metering Agua. AMI Remote Reading System in Elvas

Design and installation of an AMI remote reading system in the Portuguese town of Elvas



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	OSE-Obras Sanitarias del Estado
Country	Uruguay
Start date	04/2013
End date	Actualidad

Smart Metering Agua. AMI Remote Reading System in Uruguay

Design and installation of an AMI remote reading system in an area of the city of Montevideo



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	EMABESA-Empresa Mixta de Benalmádena (Ayuntamiento/Aqualia)
Country	Spain
Start date	06/2012
End date	Actualidad

Smart Metering Agua. AMI Remote Reading System in Benalmádena

Design and installation of an AMI remote water reading system in Benalmádena



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	Canal de Isabel II Gestión
Country	Spain
Start date	04/2013
End date	12/2013

Smart Metering Agua. AMI Remote Reading System in Madrid

Design and installation of an AMI remote reading system in 3 sectors within the management of the Canal de Isabel II



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	GAV-Grupo de Aguas de Valencia
Country	Spain
Start date	06/2010
End date	04/2011

Smart Metering Agua. Remote Reading System in Quart de Poblet

Design and installation of an AMI remote reading system for the 11,500 meters in the town of Quart de Poblet



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	Amvisa (Aguas Municipales de Vitoria-Gasteiz)
Country	Spain
Start date	09/2010
End date	04/2011

Smart Metering Agua. Remote Reading System in Vitoria-Gasteiz

Design and installation of an AMI remote reading system for the 4500 water meters in the neighbourhoods of Marriturri and Txagorritxu in the city of Vitoria



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Ikor
Address	Parque Empresarial Zuatzu
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikor.es
Email	mcampos@ikor.es
Customer	Servicios de Txingudi
Country	Spain
Start date	07/2009
End date	11/2013

Smart Metering Agua. Remote Reading System in Irún

Design and installation of an AMI remote reading system for the 32,000 water meters in the city of Irún. The integration of the readings in the Utility's comprehensive management system has produced qualitative benefits, with improved public service, as well as quantitative benefits, reducing energy costs by 40% and reducing leakages by up to 70%



Ikusi

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	Ikusi
Address	Paseo Miramón, 170
zip code	20009
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.ikusi.com
Email	ikusi@ikusi.com
Customer	Ayuntamiento de Donostia-San Sebastián
Country	Spain
Start date	01/06/2013
End date	Proyecto principal 01/11/2013. Ampliación en ejecución

Energy Efficiency System in Municipal Buildings

The target systems for energy monitoring are:

- Indoor and outdoor lighting
- Power circuits
- Climate control and air conditioning

The main operations covered by this project are:

- Remote monitoring of the electricity consumption of each building
- Benchmarking between the different buildings
- Creation of consumption records
- Reporting
- Control and remote control of on/off commands
- Assessment for the implementation of energy saving strategies.



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
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zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	Ferrosfer
Country	Spain
Start date	11/2013
End date	Actualidad

Pando Aisia Sports Centre and Muelle Churruca Swimming Pools Energy Monitoring

Telemetry and centralised energy management project in the most significant areas of energy consumption in the sports centre and swimming pools. General electricity and gas consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	Getxo Kirolak
Country	Spain
Start date	01/2013
End date	Actualidad

Getxo Kirolak Energy Monitoring

Telemetry and centralised energy management project in the most significant areas of energy consumption in the sports complex (swimming pool, gym, athletics tracks, football pitches, fronton tennis courts). General electricity and gas consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



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Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
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zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	PI Txorierri
Country	Spain
Start date	01/2013
End date	02/2014

PI Txorierri Energy Monitoring

Telemetry project in the school. General electricity consumption is monitored in the premises. This monitoring enables us to optimise the contracted rates and analyse the general consumption pattern and also provide records as often as required. It enables invoice auditing and the efficiency measures taken to be checked. Training is given via the management platform so that the client can use the information autonomously



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	IEFPS Usurbil GLHBI
Country	Spain
Start date	04/2012
End date	Actualidad

IEFPS Usurbil Energy Monitoring

Telemetry and energy management project in the school. Electricity consumption and underconsumption are monitored in areas with the greatest potential for energy savings in the premises, as well as renewable energy production (hydrogen, geothermal and wind power). This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions and huge educational support for students and staff. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	IEFPS Bidasoa GLHBI
Country	Spain
Start date	04/2013
End date	Actualidad

IEFPS Bidasoa Energy Monitoring

Telemetry and energy management project in the school. General electricity and gas oil consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings in the premises. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions and huge educational support for students and staff. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



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Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	IES Campuzano BHI
Country	Spain
Start date	12/2013
End date	Actualidad

IES Campuzano BHI Energy Monitoring

Telemetry and centralised energy management project in the school buildings. General electricity, heating, gas and water consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings in the premises. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions and huge educational support for students and staff. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	IEFPS Elorrieta
Country	Spain
Start date	11/2013
End date	Actualidad

IEFPS Elorrieta Energy Monitoring

Telemetry and energy management project in the school. General electricity, gas oil and water consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings in the premises. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions and huge educational support for students and staff. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	Tknika
Country	Spain
Start date	08/2013
End date	Actualidad

Tknika Centre Energy Monitoring

Telemetry and energy management project in the centre. General electricity, heating, gas and water consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings in the premises, as well as renewable energy production. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions and huge educational support for students and staff. Training is given via the management platform so that the client can use the information autonomously, also offering the ability to carry out energy management tasks



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	Ayuntamiento de Durango
Country	Spain
Start date	04/2013
End date	Actualidad

Durango City Council Energy Monitoring

Telemetry and centralised energy management project for various municipal buildings (Town Hall, 2 sports centres and library). Electricity, gas and water consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings in all the premises, as well as solar energy production. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Basic tool to prioritise and check the results of corrective actions. A 30% reduction in energy consumption was achieved in the Town Hall in the first 6 months after monitoring was introduced



EMS2

Area	SMART ENVIRONMENT
Sub-area	ENERGY/ENERGY EFFICIENCY
Company	EMS2
Address	Avda. Altos Hornos de Bizkaia, 33-Edificio Ilgner, Mod - I15
zip code	48180
Town	Leioa
Province	Vizcaya
Web page	http://www.ems2.net/
Email	administracion@ems2.net
Customer	Tecuni, S.A.
Country	Spain
Start date	08/2013
End date	Actualidad

Bilbao City Council Energy Monitoring

Telemetry and centralised energy management project for various municipal buildings (Town Hall, municipal offices and technical departments, education centres, public safety building and civil protection building). Electricity, gas and water consumption and electricity underconsumption are monitored in areas with the greatest potential for energy savings in all the premises. This monitoring enables us to detect phantom load (standby power) and optimise usage habits, which results in huge energy savings. Training is given via the management platform so that clients can use the information autonomously, also offering the ability to carry out energy management tasks



Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Dinycon Sistemas
Address	C/ Portuetxe, 23 B-Planta 2, Oficina 16
zip code	20018
Town	Donostia-San Sebastián
Province	Guipúzcoa
Web page	http://www.dinycon.com
Email	internacional@dinycon.com
Customer	Ayuntamiento de San Sebastián (Edificio ENERTIC)
Country	Spain
Start date	11/2012
End date	Actualidad

Gesagua

Water harvesting system (rainwater, black and grey water) with remote management



Arson

Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Arson
Address	Parque Tecnológico de Bizkaia, Ibaizabal Bidea, Edificio 500 - 2ª Planta
zip code	48160
Town	Derio
Province	Vizcaya
Web page	http://www.arson.es
Email	gustavo@arson.es
Customer	Consortio de Aguas de Bilbao
Country	Spain
Start date	03/2011
End date	Actualidad

Aquacity System. Smart Water

The project proposed from Bilbao Water Consortium to Arson involves the establishment of a REMOTE LANDLINE READING SYSTEM to take daily readings of various models of water meters using a radiofrequency communications protocol. In a pilot of about 100 meters installed in Alonsotegui, daily meter readings are being taken using Arson's aquaCity system.



Arson

Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Arson
Address	Parque Tecnológico de Bizkaia, Ibaizabal Bidea, Edificio 500 - 2ª Planta
zip code	48160
Town	Derio
Province	Vizcaya
Web page	http://www.arson.es
Email	gustavo@arson.es
Customer	Elster Iberconta
Country	Spain
Start date	09/2014
End date	11/2014

Aquacity System. Smart Water

The project proposed by Elster Iberconta to Arson involves the establishment of a REMOTE LANDLINE READING SYSTEM to read various models of water meters using different communications protocols, proving a universal capture system for the recordings of different manufacturers' meters. A network of 24 reading or levels devices will be installed on an installation of 932 meters that will generate a file with the data collected on a daily basis. Units will be installed in the town of Santurce, with the end customer being Bilbao Water Consortium.



Arson

Area	SMART ENVIRONMENT
Sub-area	WATER AND SANITATION
Company	Arson
Address	Parque Tecnológico de Bizkaia, Ibaizabal Bidea, Edificio 500 - 2ª Planta
zip code	48160
Town	Derio
Province	Vizcaya
Web page	http://www.arson.es
Email	gustavo@arson.es
Customer	Acciona Agua
Country	Spain
Start date	09/2014
End date	12/2014

Aquacity System. Smart Water

Within the European project SMARTWATER4EUROPE, which involves a European consortium of 21 companies, Arson is participating in the demo site "SMART WATER". In this project Arson, in partnership with ACCIONA AGUA, will, from September 2014, supply and install the landline infrastructure for the remote reading of 8500 drinking water meters produced by various manufacturers and communications protocols (radiofrequency and UNE-82326). The aquaCity universal system that will be installed will consist of 2000 devices, distributed at different reading levels, which will take weekly readings of each meter, sending the data to ACCIONA AGUA's control centre, where it will be processed and integrated into its Business Intelligence.