ENVIRONMENTAL STATEMENT

2017-18 Academic Year

SEP 2017 - AUG 2018

universidad SANJORGE
GRUPO SANVALERO

EMAS
Gestión ambiental verificada

REG.Nº ES-AR-000025

CONTENTS

1. CHANCELLOR'S PRESENTATION

Environmental commitment and sustainable development is one of the hallmarks of San Jorge University.

Throughout the 2017-18 academic year, the entire university community, students, teachers, researchers, technical and management staff and suppliers have committed to a series of actions that improve the performance and minimise the environmental impact of our daily activity.

This environmental statement covers all these developments and provides our stakeholders with transparent, rigorous and detailed information on the environmental impact of our activity as well as the progress made to improve sustainability.

Carlos Pérez Caseiras

Chancellor at San Jorge University.

2.PRESENTATION OF THE ORGANISATION

2.1. San Valero Group

San Jorge University is a non-profit Aragonese institution promoted by the Fundación San Valero and based on Christian humanism.

San Jorge University belongs to the San Valero Group, which also consists of the following educational institutions:

- Fundación San Valero.
- SEAS Estudios Superiores Abiertos.
- Fundación San Valero.
- Fundación CPA Salduie.

ORGANISATION OF THE SAN VALERO GROUP

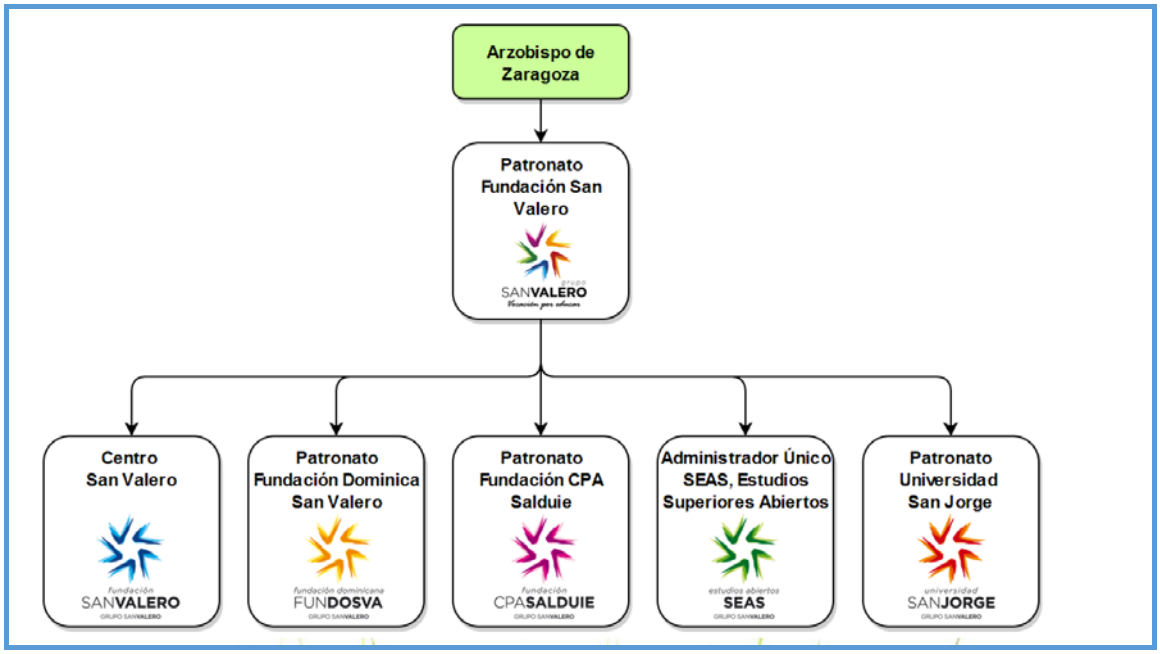


Image1: San Valero Group organisation chart

SAN VALERO GROUP IN NUMBERS

2017 – 18 Academic Year	Students	Employees
Fundación San Valero.	2,963	201
Fundación Dominicana San Valero	5,480	187
Fundación CPA Salduie	549	61
SEAS, Estudios Superiores Abiertos	17,077	193
San Jorge University	2,074	461
San Valero Group Total	**28,093**	**1,103**

Table 1: San Valero Group numbers.

Quality and Environmental Policy of the San Valero Group

POLÍTICA DE CALIDAD Y MEDIO AMBIENTE

La calidad y la sensibilidad medioambiental son dos de las señas de identidad en la cultura del Grupo San Valero, grupo pionero en el sector educativo aragonés en la implantación de sistemas estandarizados que aseguran a alumnos, familias, empleados y empresas una gestión basada en la sostenibilidad, la mejora continua, la satisfacción de los grupos de interés y la prevención de los riesgos laborales.

El Grupo San Valero, a través de sus sistemas de gestión, pretende destacar en la calidad del servicio prestado la innovación en sus métodos educativos, la tutorización personalizada de los alumnos, la salud laboral de sus empleados y el respeto hacia el medio ambiente.

La presente Política aquí expuesta representa el marco para la actuación y la fijación de objetivos y metas, tanto en aspectos medioambientales como en la trayectoria de la mejora continua.

La Calidad y el compromiso medioambiental constituye un elemento básico e inexorable patente en la cultura de todas y cada una de las instituciones del Grupo San Valero, de modo que se consiga aumentar la competencia y la concienciación del personal propio orientados a la mejora continua de los servicios prestados, así como la gestión de sus acciones acorde a criterios ambientales y de prevención de la contaminación para lograr disminuir el impacto sobre el medio ambiente.

Por último, a través de este manifiesto, se adquiere un compromiso de reducción de residuos generados, siempre que sea posible la recuperación y reciclaje de los mismos, disminuir el consumo de recursos naturales y promover el ahorro energético.

César Romero Tierno
Director General del Grupo San Valero
Aprobación: Junio de 2015

Environmental commitment is one of the hallmarks of the San Valero Group, as reflected in the group's quality and environmental policy. At the forefront, the Fundación San Valero stands out as a pioneer in the implementation of an integrated management system certified with the ISO 14001 standard and its adherence to the EMAS registry from the 2009-10 academic year.

Image 2: San Valero Group.

2.2. San Jorge University

San Jorge University has its origins in the Fundación San Valero, an institution that established the foundations of the private University of Aragón.

On 24 February 2005, the Cortes de Aragón approved the law recognising the establishment of the San Jorge University, and its implementation was approved. Its journey in the field of higher education began in this way.

The first academic year was 2005-06, and since the 2007-08 academic year the classes have been taught at the Villanueva de Gállego University Campus.

Image 3: San Jorge University.

Mission	Vision	Values
San Jorge University's mission is to serve society by creating and transmitting knowledge, and integrating students through processes of innovation and continuous improvement.	Our vision is to be a consolidated, prestigious University for: • Our educational model, educational activity and degree offering, which facilitate employability and international mobility, and at the same time, are flexible for the development of lifelong learning. • Our research capacity, innovation and knowledge transfer, with relevant impact on the socioeconomic environment. • Collaborating in projects and promote initiatives that actively contribute to the progress of Aragonese society. • Being socially responsible.	San Jorge University has and promotes as its own values those described below: • Responsibility. • Social commitment. • Critical thinking. • Self-demand and effort. • Entrepreneurial attitude. • Spirit of service. • Sense of belonging. • Teamwork. • Creativity. • Adaptable.

Table 2: mission, vision and values.

2.3. Villanueva de Gállego University Campus.

San Jorge University has its campus located in the town of Villanueva de Gállego, some 15 kilometres from Zaragoza, its address is:

San Jorge University
Campus Universitario Villanueva de Gállego.
Autovía A-23 Zaragoza – Huesca, Km. 510
CP 50830 – Villanueva de Gállego
(Zaragoza)
CIF: G-99047672
Telephone: (+34) 976 060 100
Web: www.usj.es

Image 4: location.

Image 5: Villanueva de Gállego University Campus. A: sports campus, B: Student hub, C: Jalón Ángel building, D: Rectorado building, E: Faculty of Health Sciences (Phases 1, 2 and 3).

The Villanueva de Gállego campus consists of four buildings: Rectorado, Jalón Ángel, Student Hub and Faculty of Health Sciences (divided into 3 buildings), landscaped areas and pine tree areas, managed by the University. The campus has sports areas: gym, swimming pools, soccer fields and paddle courts. The sports campus is owned by the Villanueva de Gállego Town Council, who is responsible for its maintenance and management. The University has an agreement with the Town Council that the university community are permitted to use these sports areas.

Image 6: Rectorado.

The Rectorado building located in the centre of the campus, houses the School of Architecture and Technology, with classrooms and workshops focused on providing the best learning environment for students. Among them stands out the digital manufacturing workshop that the Architecture degree has launched with 3D printers to serve not only the University, but also any area of society that requires it. This building also is home to the offices of the members of the Governing Council and different departments of the University as well as the University chapel, Aula Magna (main hall) and a cafeteria.

Image 7: Jalón Ángel building.

The Faculty of Communication and Social Sciences is located in the Jalón Ángel building of the university campus. The Faculty houses a live radio recording studio and a television set, nine video editing booths and three radio recording studios as well as different classrooms and workshops. These are all valuable resources for the professional preparation of the students.

Image 8: Faculty of Health Sciences

The Faculty of Health Sciences has three buildings and a confined interior plaza. The first building has labs for biology, chemistry and research equipped with the latest technology that encourage an eminently practical education and create a real learning environment for students.

The second building has an Aula Magna for more than 260 people with both a control booth and a translation booth. Moreover, this building has classrooms, offices and workshops for all the health-related degrees.
The third and last building has an Advanced Biomechanics centre, a Clinical Simulation Centre, classrooms, workshops and stretcher rooms for the physiotherapy degree.

Within the development and growth plan of San Jorge University, the Student Hub was inaugurated in the second semester of the 2016-17 academic year. It is a space dedicated to students and their life within the university, a meeting point for them, where they can use the facilities to work on academic and extra-academic activities. In addition, this building is home to all the services that San Jorge University offers students.

Image 9: Student hub

The library is located on the first floor of the Student Hub. This new library boasts new features with respect to the previous one, among which are larger dimensions to accommodate a larger number of students. It has been conceived as a building highly committed to sustainability from its project phase, incorporating technologies that exploit natural resources and existing facilities, as well as optimal use of energy.

2.4. Organisational chart

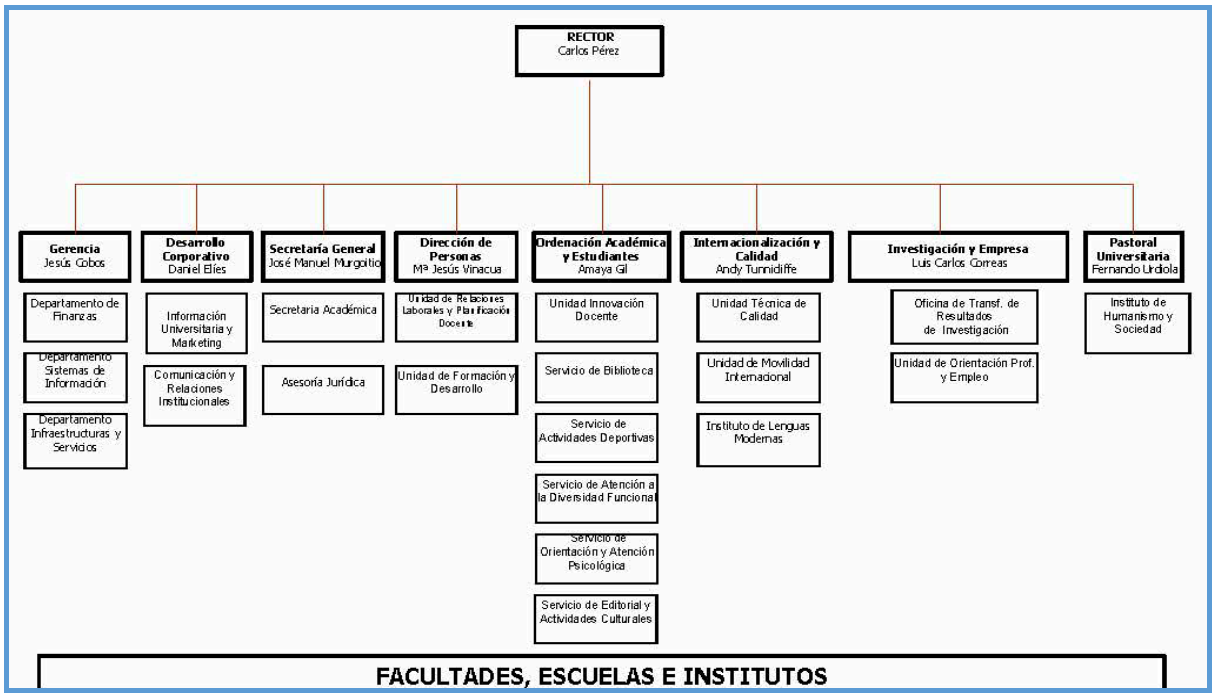


Image 10: organisational chart

3. ENVIRONMENTAL MANAGEMENT SYSTEM

3.1. R&D, environmental and quality policy

universidad SANJORGE
GRUPO SANVALERO

POLÍTICA DE CALIDAD, MEDIO AMBIENTE e I+D+i

La Universidad San Jorge es una institución aragonesa sin ánimo de lucro que tiene como misión servir a la sociedad creando y transmitiendo conocimiento y contribuyendo en la formación de personas íntegras y buenos profesionales. Nuestra meta es formar profesionales expertos en la práctica de su titulación, con criterio y flexibilidad para adaptarse al ritmo cambiante del mercado laboral, tanto nacional como internacional, y de la sociedad en general.

Por ello, trabajando en la mejora continua del Sistema de Gestión Integrado de Calidad, Medio Ambiente e I+D+i, dirigimos nuestros esfuerzos a garantizar la más alta calidad en la enseñanza y servicios que ofrecemos a nuestros estudiantes y a la sociedad, para satisfacer sus necesidades actuales y alcanzar la excelencia académica. Para cubrir las necesidades de la sociedad la oferta académica de la Universidad San Jorge se organiza en un mapa de titulaciones que está en permanente proceso de adaptación.

Por todo lo anterior, la Universidad San Jorge se compromete a desarrollar todas sus actividades en una dinámica de mejora continua, tomando como referencia las siguientes premisas:

- Establecer una estructura organizativa clara y bien definida que facilite la gobernanza de la Universidad.
- Promover la identificación y el compromiso de todos los colaboradores con el proyecto de la Universidad garantizando la igualdad de derechos y oportunidades, así como un estilo de trabajo basado en el espíritu de servicio y la colaboración.
- Fomentar el nivel de participación y de compromiso de los distintos grupos de interés, ampliando y manteniendo colaboraciones y alianzas con empresas, instituciones, administración, agentes sociales, etc., y apoyándose en una comunicación eficaz y transparente entre todos los grupos de interés.
- Realizar una gestión eficiente de los recursos utilizados, tanto humanos como materiales.
- Apostar por la aplicación de las más modernas tecnologías de información y comunicaciones, tanto en el ámbito docente como en la gestión.
- Potenciar el respeto por la calidad y el medio ambiente en sus proveedores y contratas.
- Proteger el medio ambiente, incluyendo la prevención de la contaminación, utilizando racionalmente los recursos y minimizando los impactos ambientales, así como la generación de residuos, emisiones y vertidos, mediante la aplicación de programas de mejora continua que favorezcan la mejora del desempeño ambiental.
- Facilitar la adaptación del estudiante al ámbito universitario, orientándolo en su itinerario de especialización dentro del plan de estudios, y generándole inquietud por adquirir una educación de calidad y prestigio, que favorezca su crecimiento personal y su interés por continuar formándose a lo largo de su vida.
- Sensibilizar y formar al estudiante sobre los aspectos e impactos ambientales derivados tanto de su actual actividad formativa como de su futura actividad profesional.
- Fomentar la innovación, la creatividad y la colaboración en las actividades de investigación entre las partes interesadas, en especial estudiantes, profesores y empresas e instituciones del entorno.
- Apoyar al estudiante en la realización de actividades formativas fuera del aula como participación en congresos, prácticas en empresas o programas de movilidad con otras universidades españolas, europeas o de otros continentes.
- Capacitar al estudiante no sólo para dar respuesta a las necesidades de la empresa, sino para plantear interrogantes a la misma y a la sociedad.

En esa línea de actuación, la Universidad San Jorge se compromete a cumplir los principios del Espacio Europeo de Educación Superior (EEES) recogidos en la Declaración de Bolonia, los requisitos exigibles por nuestros estudiantes y la sociedad, los legales y normativos, y cualquier otro que la Universidad adquiera en materia de calidad, medio ambiente e I+D+i. A su vez, la Universidad San Jorge se compromete a desarrollar una cultura de la innovación a través de sus actividades de investigación en todos los ámbitos de conocimiento, priorizando la investigación aplicada en líneas con un impacto relevante en la sociedad y la transferencia de los resultados y conocimientos adquiridos con la sociedad.

Esta política es una declaración de las intenciones y principios de la Universidad San Jorge, que además proporciona un marco global para el establecimiento y revisión de sus objetivos estratégicos, de calidad, de medio ambiente y de I+D+i.

El Consejo Rector de la Universidad San Jorge se compromete a proporcionar los recursos humanos y materiales necesarios para la planificación, ejecución y seguimiento de los programas y/o actuaciones necesarias para la implantación del Sistema de Gestión Integrado de la Universidad, y a asegurar su correcta difusión y aplicación por todos los miembros de la comunidad universitaria con el fin de alcanzar los objetivos fijados.

Esta política es revisada anualmente, comunicada a todos los miembros de la comunidad universitaria y puesta a disposición de la sociedad.

En Villanueva de Gállego, a 4 de abril de 2017

Consejo Rector,

Carlos Pérez
Rector

Jesús Cobos
Gerente

José Manuel Murgoitio
Secretario General

Amaya Gil
Vicerrectora de Ordenación Académica y Estudiantes

María Jesús Vinacua
Adjunta al Rector en Dirección de Personas

Andy Tunnicliffe
Adjunto al Rector en Internacionalización y Calidad

Luis Carlos Correas
Vicerrector de Investigación y Empresa

Daniel Elíes
Adjunto al Rector en Desarrollo Corporativo

Fernando Urdiola
Responsable de Pastoral

3.2. Integrated Management System Scope

Since December 2011, San Jorge University has an Integrated Management System (SGI) certified by AENOR in accordance with ISO 9001 and ISO 14001 standards. These certifications were renewed in December 2017.

Continuing with its commitment to the environment and the continuous improvement of the University, in May 2016, the Aragonese Institute of Environmental Management (INAGA) decided to register San Jorge University in the EMAS register (ES-AR-000025).

The scope of the Integrated Management System is as follows:

> The design, development and delivery of curricula of official degrees (bachelor's, master's and doctorate), own degrees and conducting research activities in the School of Architecture and Technology, the Faculty of Health Sciences and the Faculty of Communication and Social Sciences.
>
> Providing support services for activities carried out in the teaching and research areas: professional orientation, employment exchange, external work experience programme, mobility programme, library, sports activities, counselling and psychological care and cultural activities.
>
> These activities take place at the Villanueva de Gállego University Campus, located at Autovía A-23 Zaragoza-Huesca, Km. 50830 Villanueva de Gállego (Zaragoza)

3.3. NACE codes to describe activities

(NACE Rev.2) 85.42 Tertiary education.

3.4. Integrated Management System Scope

San Jorge University has opted for the design of its Integrated Management System (IMS) for following both the guidelines set by ANECA in the AUDIT program and the requirements established by the international standards ISO 9001, ISO 14001 and the Regulations (CE) No. 1221/2009 and (EU) 2017/1505 concerning the voluntary participation of organisations in a community environmental management and audit system (EMAS).

The Integrated Management System (IMS) is established with the following documentary structure:

Policy: Set of actions or guidelines that govern the performance of the University in terms of quality and environment, formally expressed by the Governing Council, which allows us to be better in fulfilling our purpose or commitment.

Manual: Document in which the scope of the system is defined, reference to the procedures and a description of the interaction between the processes of the system.

Procedures: Document that defines what, who, how and when a general activity or process is carried out.

- PR-001 Management of Non-conformities
- PR-002 Management of Claims, Environmental Complaints, Incidents and Suggestions
- PR-003 Internal Communication
- PR-009 Control of Documentation and Records
- PR-010 Action Plan Management
- PR-015 Internal Audits
- PR-016 Revision by Management
- PR-033 Preparation, Review and Publication of the Policy and Objectives of Quality and Environment
- PR-050 Material Resources Management
- PR-051 Needs, Expectations and Satisfaction of Stakeholders
- PR-054 Employee Training
- PR-061 External Communication
- PR-066 Identification and Evaluation of Environmental Aspects
- PR-067 Identification and Review of Legal Requirements
- PR-077 Operational Control, Monitoring and Measurement of Environmental Aspects.
- PR-078 Environmental Emergencies
- PR-087 Planning of the Integrated Quality and Environment Management System

Technical instruction: Document in which the completion of a specific task or activity is specified in detail. The instructions usually refer to a procedure from which one of its aspects is developed.

- IT-001 Hazardous Laboratory Waste Management
- IT-002 Sanitary Waste Management

Technical Instruction Summary: Technical Instruction which eliminates certain sections that are not considered of interest for the students, since they are always published for their information. The Technical Instructions Summary always derives from a Technical Instruction.

Informative Document: A document that collects information on specific aspects of university life, usually in the form of a manual or guide, and aimed at interest groups that are not University staff. Generally, the informative documents are reviewed and updated annually, at the beginning of each academic year, in order to keep the information updated.

- DI-032 Indicators Manual
- DI-037 Strategic Plan
- DI-048 SGI Review Report by Management
- DI-049 Process Manual
- DI-060 Environmental statement

Internal Regulation: Document that includes the regulations of internal use to the University and established in the same way by the University itself.

Format: Printed to collect the results of activities and data. It is an original template.

Registry: Completed format or any other external document that evidences the result of an activity or process.

3.5. Process map

San Jorge University has developed a process map that correlates the interaction between the different key, strategic and support processes.

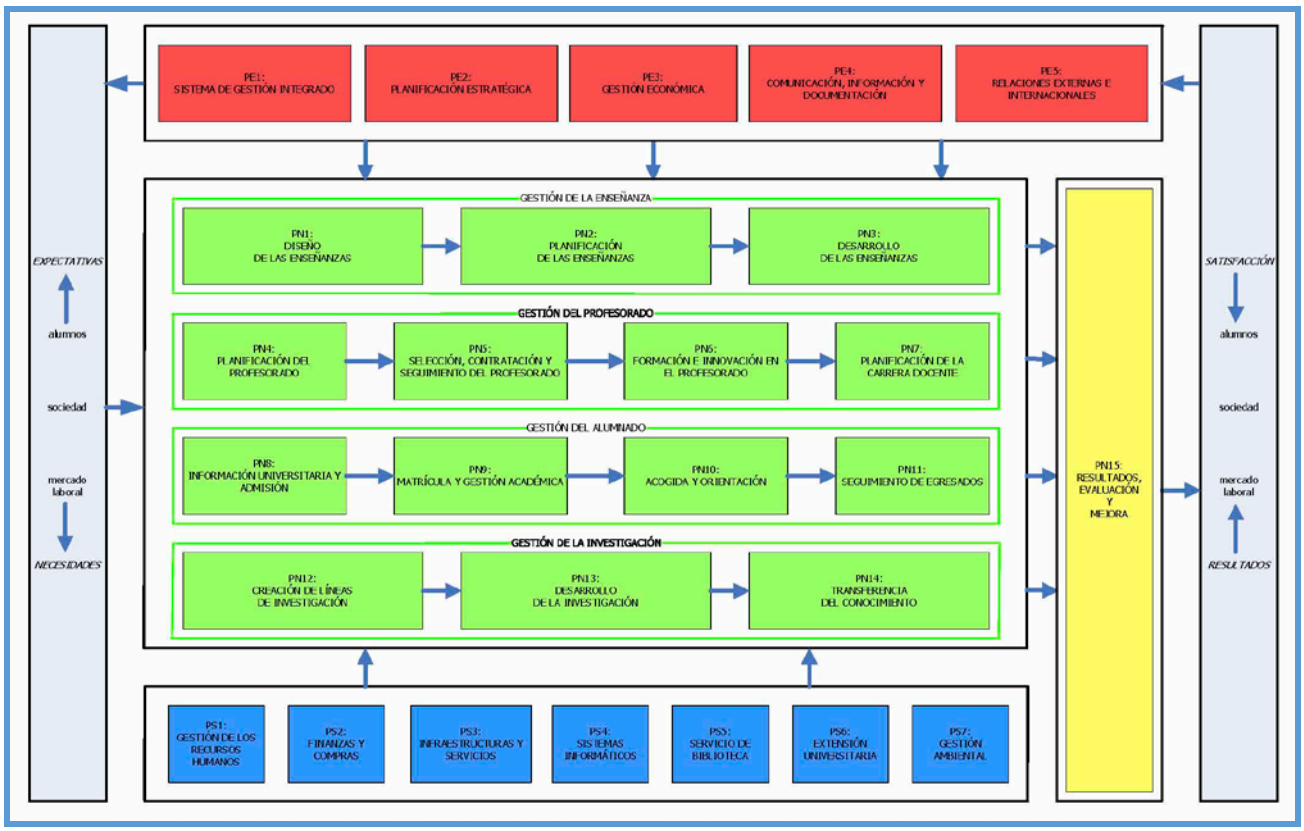


Image 11: process map.

3.6. University context

San Jorge University considers the context in which it carries out its activity, including the environmental conditions capable of affecting or being affected by the organisation, through the analysis of diverse sources, embodied in a five-year Strategic Plan. Prior to drafting the Strategic Plan, a strategic reflection is carried out on the university model to be adopted, taking into account and identifying the risks and opportunities for improvement, considering the environmental analysis established by the EMAS Regulation.

The Governing Council has determined the interested parties or stakeholders relevant to the University, and ensures that the needs and expectations of the stakeholders (paying special attention to University students), together with the legal and regulatory requirements, are identified and fulfilled.

Stakeholders	Students
	Employees
	Employers
	Government bodies
	Society
	Suppliers and contractors

Table 3: stakeholders

3.7. Risks and opportunities

San Jorge University, considering its context and the needs and expectations of the stakeholders, determines the risks and opportunities and plans the necessary actions to address said risks and opportunities, evaluating also the effectiveness of the actions taken.

In relation to the process "PS7 Environmental Management", the following risks and opportunities for the 2017-18 academic year have been determined:

RISKS	OPPORTUNITIES
R1: New legislation or new client requirements related with environmental issues	O1: Promote a positive image of the University through the dissemination of the achievements in environmental issues
R2: Environmental performance deteriorates after having addressed the most significant environmental aspects for the organisation	O2: Participate in specific rankings that take into account the environmental variable
R3: Little involvement and participation of stakeholders in the environmental management process	O3: Apply transfer of knowledge acquired in the organisation in environmental management to other areas such as teaching and research projects
R4: Changes in the activities developed in the Campus that entail new environmental aspects	O4: Apply the specific knowledge of the environment available to the university community to use in improving the management system
R5: Generation of indirect environmental aspects that are difficult for the organisation to control	

Table 4: risks and opportunities of the environmental management process.

4.DESCRIPTION OF THE ENVIRONMENTAL ASPECTS

The methodology established at San Jorge University to identify, evaluate and record direct, indirect and emergency environmental aspects is documented in procedure PR-066 Identification and Evaluation of Environmental Aspects.[1]

Once the environmental aspects have been identified and quantified, they are evaluated using the following criteria:

- Gravity (Gr): degree of danger/incidence.
- Magnitude (Mg): quantification of the appearance.
- Frequency (Fr): probability that this situation will occur.

The significance of the direct and indirect aspects in normal situation is calculated according to the following expression:

Significance = 3Mg + 2Gr

The significance of the aspects in emergency situation is calculated according to the following expression:

Significance = 3Mg + 2Fr

Once calculated, the top ten environmental aspects with greater significance are considered significant. The following describes the direct, indirect and emergency environmental aspects identified at San Jorge University and the environmental impacts that are derived.

[1] You can request a copy of the environmental aspects assessment procedure by contacting greencampus@usj.es

4.1. Direct environmental aspects

Type	Environmental aspect	Environmental impact
Direct	Consumption of natural resources (raw materials, water, energy and fuel)	Reduction of water resources and water pollution. Increase in air pollution. Loss of ecosystems and biodiversity. Depletion of non-renewable natural resources. Fossil fuel consumption. Climate Change
	Waste	Pollution of water resources Biodiversity loss.
	Noise	Decrease in the environmental quality of the environment.
	Emissions	Atmospheric contamination. Increase of greenhouse effect, climate change and alteration of air quality.
	Generation of non-hazardous waste	Soil pollution Contamination of aquifers by leaching. Pollution of surface waters. Greenhouse gas emissions. Soil occupation. Creation of infectious foci. Production of bad odours. Consumption of energy and materials.
	Generation of hazardous waste	Soil pollution Contamination of aquifers by leaching. Pollution of surface waters. Greenhouse gas emissions. Soil occupation. Creation of infectious foci. Risks for human health Production of bad odours. Consumption of energy and materials.

Table 5: direct environmental aspects

4.2. Indirect environmental aspects

Type	Environmental aspect	Environmental impact
Indirect	Transport	Atmospheric contamination. Increase of greenhouse effect, climate change and alteration of air quality. Fossil fuel consumption. Soil occupation. Risks for human health
	Sports activities	Reduction of water resources and increase of air pollution Fossil fuel consumption.
	Training and environmental awareness	Greater perception of the environmental problems derived from the activities. Increase in the level of knowledge to participate in sustainable development. Promotion of the sustainable development of the University. In the students development of competences on environment and sustainable development related to their field of study.
	Environmental research	Promotion of the sustainable development of society
	Contracts	Exhaustion of non-renewable natural resources. Water consumption. Soil pollution, generation of waste.

Table 6: indirect environmental aspects.

4.3. Environmental aspects in emergency situations

Type	Environmental aspect	Environmental impact
Emergen	Fire (emissions, spillage, waste)	Atmospheric contamination. Generation of waste Biodiversity loss.

		Loss of soil. Water consumption.
	Leak	Soil pollution Waste generation
	Waste	Soil and water contamination. Waste generation
	Leakage of refrigerant gases (emissions)	Atmospheric contamination. Increase of greenhouse effect, climate change and alteration of air quality.
	Liogenella outbreak	Biological contamination. Risk for public health
	Flood	Water contamination. Waste generation

Table 7: environmental aspects in emergency situations

4.4. Significant environmental aspects

In September 2018, a new evaluation of environmental aspects was carried out, which has been taken into account in the preparation of the environmental management programme for the 2018-19 academic year. The aspects that were evaluated as significant are the following:

Type	Significant environmental aspects	Environmental impact	Linked goal Year 2018-19
Direct	Electric power consumption Rectorado + Jalón Angel Building	Reduction of water resources and water pollution. Increase in air pollution. Loss of ecosystems and biodiversity. Depletion of non-renewable natural resources. Fossil fuel consumption. Climate Change	-
	Student Hub Electric Power Consumption		-
	Water consumption for cooling		-
	Waste generation Waste Electronic Equipment	Soil pollution Contamination of aquifers by leaching. Pollution of surface waters. Greenhouse gas emissions. Soil occupation. Creation of infectious foci. Risks for human health Production of bad odours. Consumption of energy and materials.	OA-06
	Generation of waste Contaminated Absorbents		OA-04
	Waste generation Contaminated Plastic Containers		OA-04
	Generation of waste Halogenated Organic Liquids		OA-04
	Generation of Non-halogenated Organic Solid waste		OA-04
	Generation of waste Inorganic solids		OA-04

Type	Significant environmental aspects	Environmental impact	Linked goal Year 2018-19
	Waste generation Printing inks		OA-02

Table 8: significant environmental aspects, 2018-19.

5. ENVIRONMENTAL MANAGEMENT PROGRAMME

5.1. Environmental action plan 2017-18

	GOAL	Related environmental aspect
OA-01	Reduce electrical consumption	Consumption of electrical energy
OA-02	Improve the environmental awareness of stakeholders	Training and environmental awareness
OA-03	Reduce photocopy consumption	Paper consumption Toner and ink waste generation *
OA-04	Improve the environmental communication with stakeholders	Training and environmental awareness
OA-05	Improve environmental communication to interest groups	Training and environmental awareness
OA-06	Reduce environmental risks in laboratories of the Faculty of Health	Spillages
OA-07	Encourage sustainable mobility	Transport

Table 9: Environmental action plan 2017-18

* Significant environmental aspects in the evaluation of aspects of September 2017

Below are the objectives and goals of the environmental programme for the 2017-18 academic year and the degree of compliance of each of them.

No.	GOAL	ANALYSIS OBJECTIVE COMPLIANCE	INDICATOR AND INTENDED RESULT	RESULT OBTAINED	STATE		MEASUREMENTS TO BE TAKEN (IF GOAL NOT MET)
					%	● ●	
OA-01	Reduce electrical consumption	Different technical actions have been carried out, but no awareness-raising actions have been conducted. The power consumption ratio has gone from 101.39 kWh / m2 to 109.99 kWh / m2. After analysing the electrical consumption in the different buildings, it has been observed that the ratio has increased across the board. Weather conditions influence the heating and cooling needs of buildings, and it is not possible to further optimise the systems.	% reduction in the power consumption/m2 ratio: 1%	+7%	50%	●	It is deemed appropriate to continue analysing the data of the electric consumption control system to try to optimise and reduce consumption, although the system is highly optimised and the variations depend mainly on weather conditions.
OA-02	Improve the environmental awareness of stakeholders	Three environmental awareness activities have been carried out, (training in safety and health week, participation in the European Week of Waste Prevention and adhesion and dissemination of challenges of the Cada gota cuenta (Every Drop Counts) campaign, #PorelClima, although they were not initially planned.	No. of activities carried out: 3	3	100%	●	
OA-03	Reduce photocopy consumption	The total number of photocopies has increased by 5% compared to the previous year, and the ratio of photocopy consumption per person has increased by 0.3%.	% reduction in the ratio of photocopies consumption per person: 1%	+0.3%	50%	●	Although the goal has not been reached, the paper photocopy consumption ratio has practically not changed.
OA-04	Improve environmental communication with stakeholders	An internal test of the Green Metric questionnaire was carried out, and the pertinence of participating in this ranking was analysed, but in the end this action is not considered to improve communication with the stakeholders.	Participate in GreenMetric World University Ranking: Yes	No	40%	●	Other actions will be sought to improve the environmental communication with stakeholders

OA-05	Improve sustainability in the green areas	During the year, progress has been made to create a medicinal garden. A working group and the preparation of a project have been created, although it has not been possible to implement it in the 2017-18 academic year.	Creation of garden / orchard of medicinal plants: Yes	No	80%	●	During the first four month period of the 2018-19 academic year, the garden will be up and running and a series of training and awareness actions associated with it will be established.
OA-06	Reduce environmental risks in laboratories of the Faculty of Health	Training, emergency drills and purchase and positioning of holding drums have been carried out.	Nº of holding drums placed: 6	6	100%	●	
OA-07	Encourage sustainable mobility	In the 2017-18 academic year, the University has joined the U-Mob project. Work has begun on the preparation of a survey and a mobility diagnosis.	Adhesion to the European University Network for Sustainable Mobility project (U-mob): Yes	Yes	100%	●	Continue with the U-mob project actions

Table 10: 2017-18 Environmental action plan adherence

5.2. Environmental strategic lines of action 2015-20

The San Jorge University strategic plan (2015-20) establishes the following strategic lines of action in environmental issues:

- Minimise the environmental impact of the university by improving efficiency in the management of material, energy and waste flows.
- Strengthen the awareness and environmental awareness of the university community.
- Promote institutional participation activities related to the environment and volunteering.

5.3. Environmental action plan 2018-19

GOAL	CURRENT SITUATION	ACTIONS TO BE CARRIED OUT (Deadline and person in charge)	INDICATOR AND INTENDED RESULT
OA-01: Improve the environmental training of stakeholders	Activities are carried out, but it is considered appropriate to improve the management	Establish an environmental training plan for stakeholders October 2018. Greencampus Office Develop training actions for Teaching and Research Staff (PDI) - Technical and Management Staff (PTG) May 2019. Greencampus Office - People Management:	No. of environmental training actions carried out EXPECTED RESULT 3
OA-02: Reduce photocopy consumption	Continue to work with those departments and centres/degrees that consume more paper to identify areas of improvement.	Review the results of previous year by departments/centres. December 2018. Greencampus Office Hold meetings with departments to identify areas for improvement. February 2019: Greencampus + departments Monitoring and communication July 2019: Greencampus Office	% reduction in the ratio of photocopies consumption: PLANNED RESULT: reduce photocopies per person by 1% ratio
OA-03 Improve sustainability in the green areas	During the 2017-18 academic year, a working group was created for a medicinal garden with teachers from the Pharmacy and Education degrees and a project was launched.	Creation of medicinal plant garden: March 2019 Infrastructures and Services, in collaboration with degree in Pharmacy and Degrees Education and Greencampus Office Information and dissemination of activities July 2019 Degree in Pharmacy, Pre-school Education, Primary Education and Greencampus Office	Creation of medicinal plant garden EXPECTED RESULT Yes

GOAL	CURRENT SITUATION	ACTIONS TO BE CARRIED OUT (Deadline and person in charge)	INDICATOR AND INTENDED RESULT
OA-04: Improve environmental management in the laboratories of the Faculty of Health Sciences	The laboratories of the Faculty of Health Sciences are characterised by the use of a wide variety of chemical products in small quantities, diverse operations and the use of the laboratory by students with little experience, so the environmental risks in this type of facilities must be very controlled.	Training on environmental management for laboratory technicians. September 2018. Greencampus Office Training for 1st-year students (within the subject Introduction to Laboratory Work) October 2018. Greencampus Office Include in the laboratory notebooks information on the correct segregation of waste October 2018. Greencampus Office Include criteria on laboratory waste management in the evaluation of practical work in the Degree in Pharmacy- October 2018. Bachelor's Degree in Pharmacy Preparation of an environmental management register for laboratories November 2018 Greencampus + Laboratories	No. activities carried out EXPECTED RESULT 5
OA-05: Encourage sustainable mobility	The University carries out a series of actions to promote sustainable transport on campus, but considers it necessary to continue improving this aspect.	Mobility survey December 2018. Greencampus Office Mobility diagnosis March 2019 Greencampus Office	Survey and diagnosis carried out EXPECTED RESULT: Yes
OA-06: Promote the proper management of WEEE	During the 2017-18 academic year there has been a significant increase in the WEEE generated, which is why it is considered necessary to raise awareness in this regard.	WEEE exhibition September 2018 Greencampus Office Visit to WEEE management facilities November 2018 Greencampus Office - Information Systems Department Establish a work system that increases the number of WEEE sent to reuse May 2019 Greencampus Office - Information Systems Department-Volunteering Unit	Equipment sent to be reused: 10

Table 11: Environmental action plan 2018-19

6. ENVIRONMENTAL BEHAVIOUR

Environmental behaviour is defined as the measurable results of the environmental management of the organisation. Below are the indicators that summarise the environmental behaviour of the 2017-18 academic year.

6.1. Methodology to calculate the indicators

Calculation for ratios.

To establish the number of people in the University that serves as the denominator in the indicators (figure B), the total number of full-time equivalents (EJC) is used.

The formula used for its calculation is the following:

No. of people (EJC) = (No. PDI EJC x 1.0) + (No. PTG EJC x 1.0) + (No. of students Degree x 0.45) + (No. of University Master's degree students x 0.25) + (No. Doctorate students x 0.05) + (No. of own degree students x 0.15)

:

PDI EJC = Number of total employees who form part of the full-time Teaching and Research Staff (PDI) in official Bachelor and Master's degrees.

PTG EJC = Number of total full-time Technical Staff and Management (PTG) equivalent.

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
No. people (EJC)	1,080.4	1,169.0	1,211.9	1,225.1	1,224.9	1,282.0

Table 12: indicator no. of people equivalent to full-time (EJC).

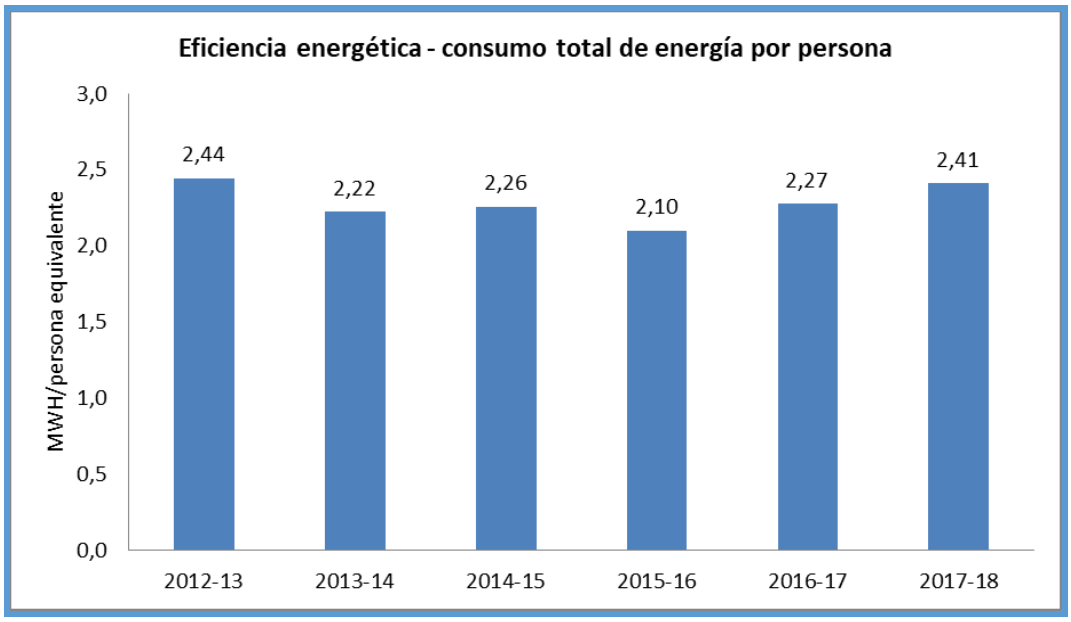
6.2. Energy consumption

Indicator: energy efficiency Direct total consumption of electricity and fuels.

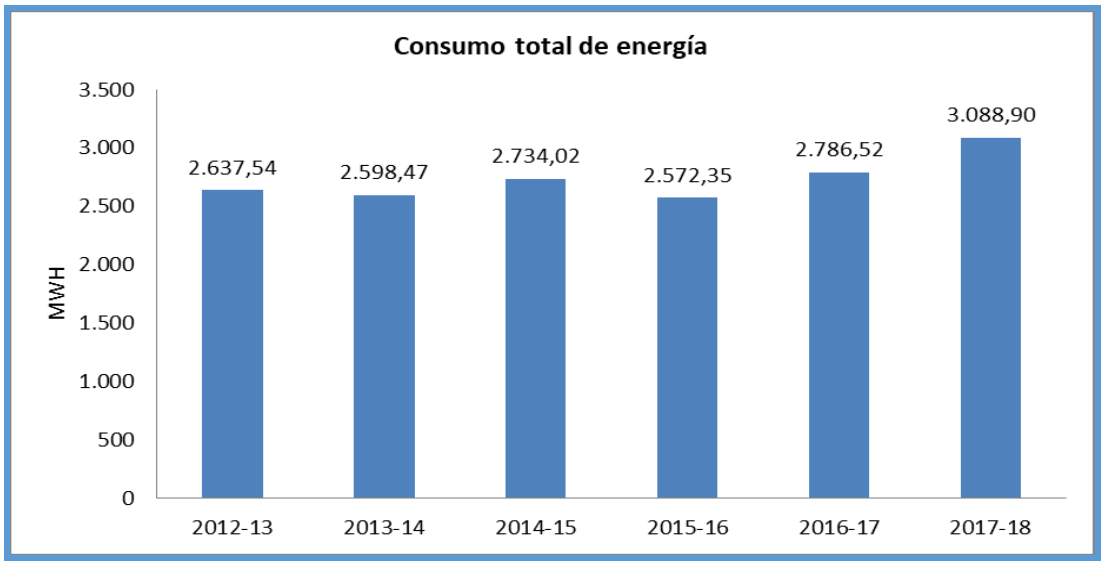
The data that is offered corresponds to the total energy consumed, considering the contribution of electricity, natural gas, heating oil and solar thermal energy produced by solar panels. Total energy consumption has increased by 9.7% compared to the previous year. The ratio of total energy consumption per person has increased by 5.5%. There has been an increase in the consumption of electricity and natural gas. It should be noted that the 2017-18 academic year is the first in which the Student Hub has been used during the entire academic period, so part of this increase in energy is related to this aspect. However, there is also an increase in the consumption of natural gas. After analysing the data, it is believed that the increase in energy consumption is related to external weather conditions, which makes it necessary to increase the consumption of resources to maintain thermal comfort in the different buildings of the university.

Energy	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Ratio of total energy consumption (MWH/person)	2.44	2.22	2.26	2.10	2.27	2.41
Total energy consumption MWH	2,637.54	2,598.47	2,734.02	2,572.35	2,786.52	3,088.90

Table 13: energy efficiency.



Graph 1: total energy consumption per person.



Graph 2: total energy consumption

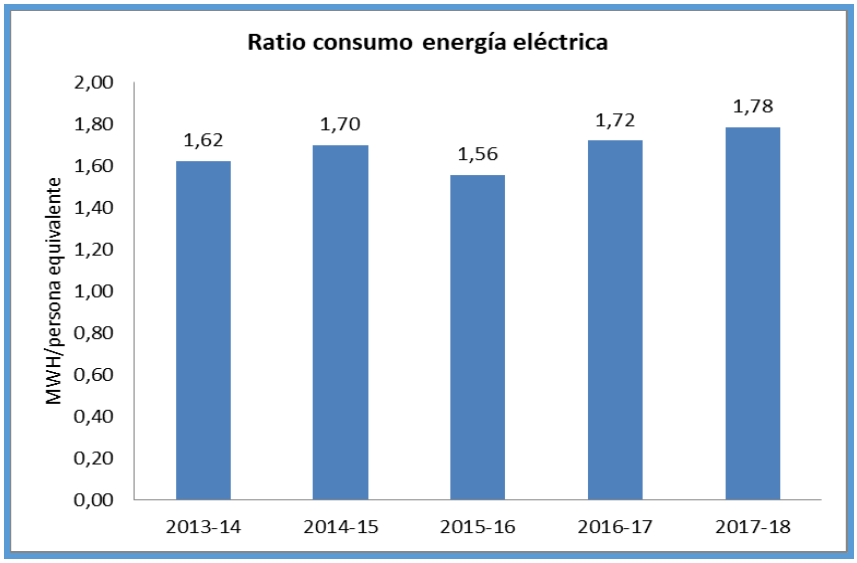
Electricity consumption.

Electricity consumption data is obtained directly from the supplier companies invoices. The consumption at the University are:

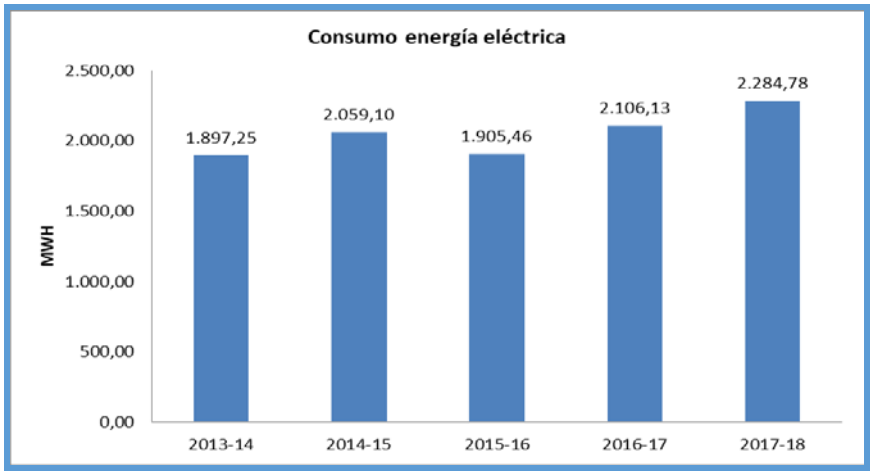
Electricity	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Ratio of electricity consumption (MWH/person)	1.73	1.62	1.70	1.56	1.72	1.78
Total electricity consumption MWH	1,866.09	1,897.25	2,059.10	1,905.46	2,106.13	2,284.78

Table 14: Electricity consumption.

Electricity consumption has increased by 7.8% in the last year, mainly due to the construction of the Student Hub (the building was opened in the second semester of the previous year). The ratio of electricity consumption per person has increased by 3.5%. As mentioned above, the external, extreme temperatures in different periods of the course have contributed to the increase in consumption. It is deemed appropriate to continue analysing the data of the electric consumption control system to try to optimise and reduce consumption, although the system is highly optimised and the variations depend mainly on weather conditions.



Graph 3: electricity consumption per person



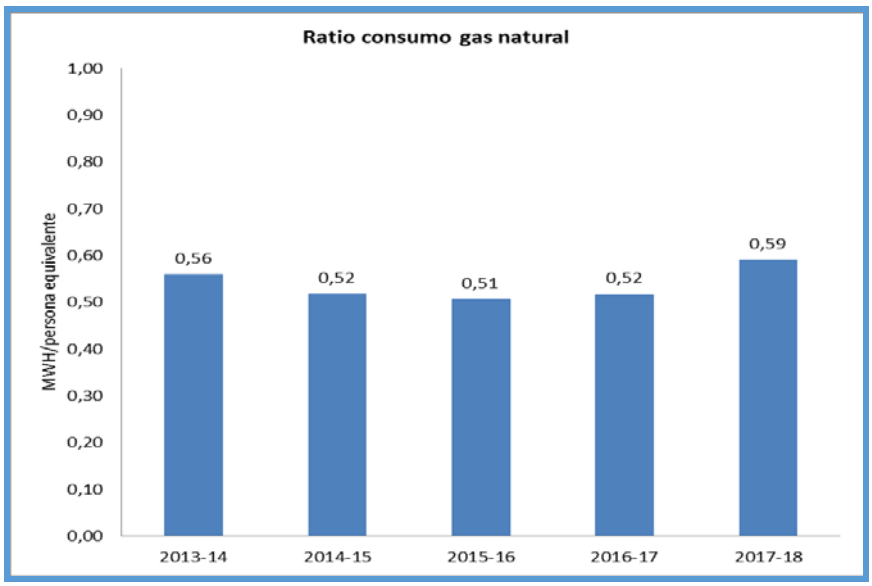
Graph4:electricity consumption.

Natural gas consumption

Natural gas is used for the heating system of the Faculty of Health Sciences, the rest of the buildings (Rectorado, Jalón Ángel and Students) use an air conditioning system based on geothermal energy. The natural gas consumption data is obtained directly from the supplier company invoices.

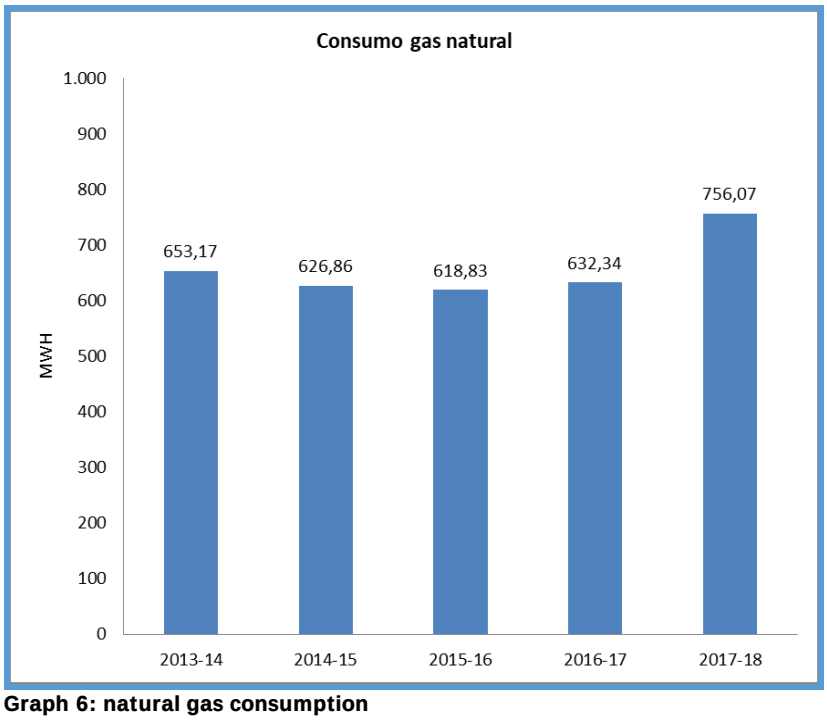
Natural gas	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Ratio of natural gas consumption (MWH/person)	0.67	0.56	0.52	0.51	0.52	0.59
Natural gas consumption (MWH)	723.39	653.16	626.86	618.83	632.34	756.07

Table 15: natural gas.



Graph 5: natural gas consumption per person

The consumption of natural gas in the last four years was maintained within a very similar range of consumption, however this year, it has increased by 16.4%. It is thought that this increase is mainly due to the low temperatures this winter and the high occupation of the Faculty of Health Sciences, which has made it necessary to increase consumption to maintain thermal comfort in the three buildings of this faculty.



Graph 6: natural gas consumption

Heating oil consumption

The University has two emergency electric generators that are powered by heating. Periodic test ignitions are carried out, to ensure its correct operation. During the period studied, they have only been used for test ignitions, so consumption is very low.

Heating oil consumption	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Ratio of heating oil consumption (MWH/person)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Total heating oil consumption MWH	0.11	0.11	0.11	0.11	0.11	0.11

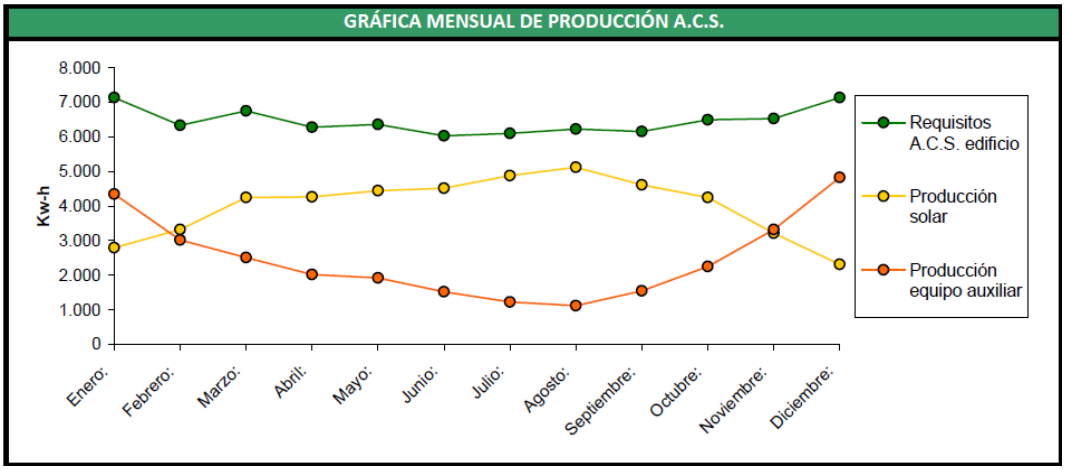
Table 16: heating oil.

Production of solar thermal energy

The University has solar panels for heating sanitary water in the Faculty of Health Sciences building. Solar thermal energy production data is available for the calculations that appear in the construction project, which take into account the characteristics of the panels and the incident energy.

PRESTACIONES ANUALES							
	Datos consumo		Energía Incidente	Producción solar		Energía apoyo	
	Total (l/año)	Total (Kw-h/año)	(Kw-h/año)	Total (Kw-h/año)	Cubrición (%)	Total (Kw-h/año)	Cubrición (%)
Total anual:	1.314.000	77.517	72.565	47.941	63	29.576	37
PRESTACIONES MEDIAS DIARIAS							
	Datos consumo		Energía Incidente	Producción solar		Energía apoyo	
	Total (l/día)	Total (Kw-h/día)	(Kw-h/día)	Total (Kw-h/día)	Cubrición (%)	Total (Kw-h/día)	Cubrición (%)
Media diaria:	3.600	212	199	131	65	81	35

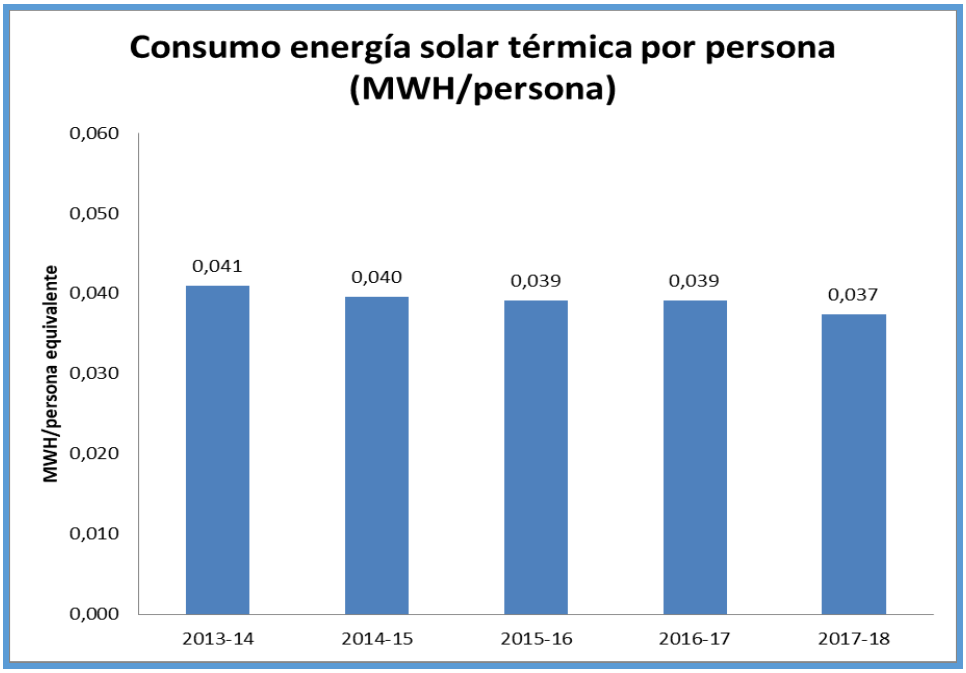
Table 14: solar thermal energy.



Graph 7: annual performance of solar panels, according to technical project.

Thermal solar energy	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Ratio of thermal solar energy (MWH/person)	0.044	0.041	0.040	0.039	0.039	0.037
Thermal solar energy production (calculated) (MWH)	47.94	47.94	47.94	47.94	47.94	47.94

Table 17: solar thermal energy.



Graph 8: thermal solar energy consumption per person

Percentage of total annual energy consumption from renewable sources

Thermal solar energy	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Percentage of total annual energy consumption from renewable sources produced by the organisation.	1.82%	1.84%	1.75%	1.86%	1.72%	1.55%

Table 18: renewable energies

Both the percentage of total annual energy consumption from renewable energy sources produced at the University and the ratio per person has decreased, since new facilities have not been put into operation and energy consumption has increased this year.

6.3. Water consumption

Water consumption at the University comes from two sources.

a) In the university buildings, sanitary water is consumed that is supplied by the Villanueva de Gállego Town Council network. The water is used in cafeterias, laboratories and services. All buildings at the university have water meters. Since July 2015, the University is responsible for the maintenance of the campus gardens that are irrigated with the municipal water network, but no data is available regarding the consumption of irrigation water.

   A water softener treatment is carried out for use in the laboratories of the Faculty of Health Sciences.

   Every year, an analysis of the sanitary water is carried out to verify the water quality criteria for consumption established in the applicable legislation.

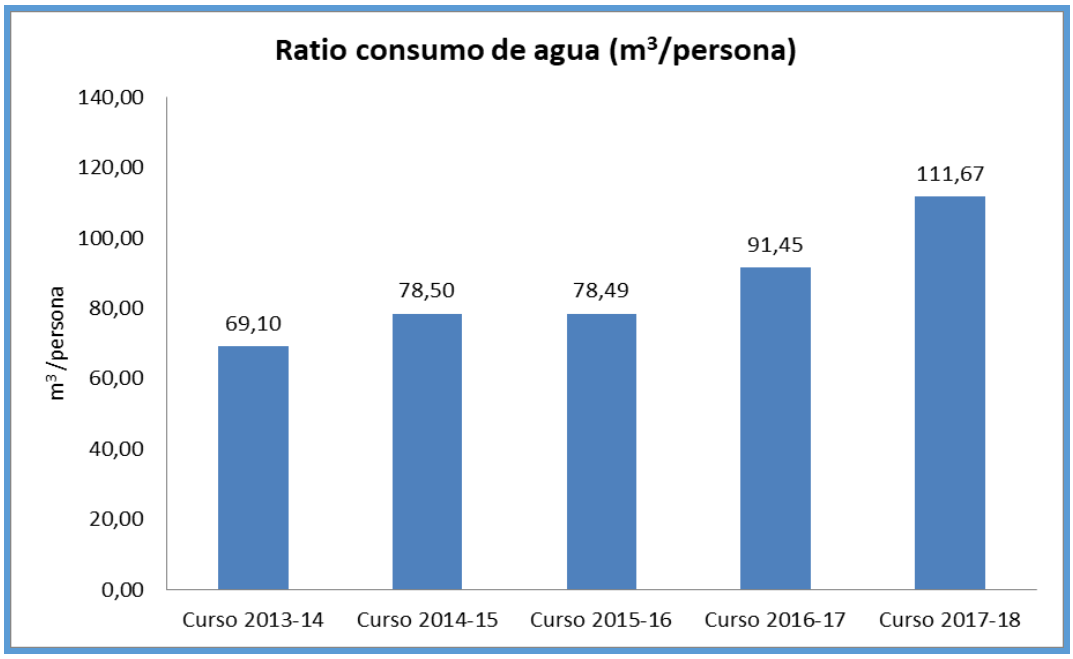
b) On the other hand, well water is used for a geothermal system that air-conditions the Rectorado, Jalón Ángel and Student Hub buildings. The water that is collected from the well is not treated, and is poured back into the aquifer through a well after use.

Total water consumption **(m^3)**

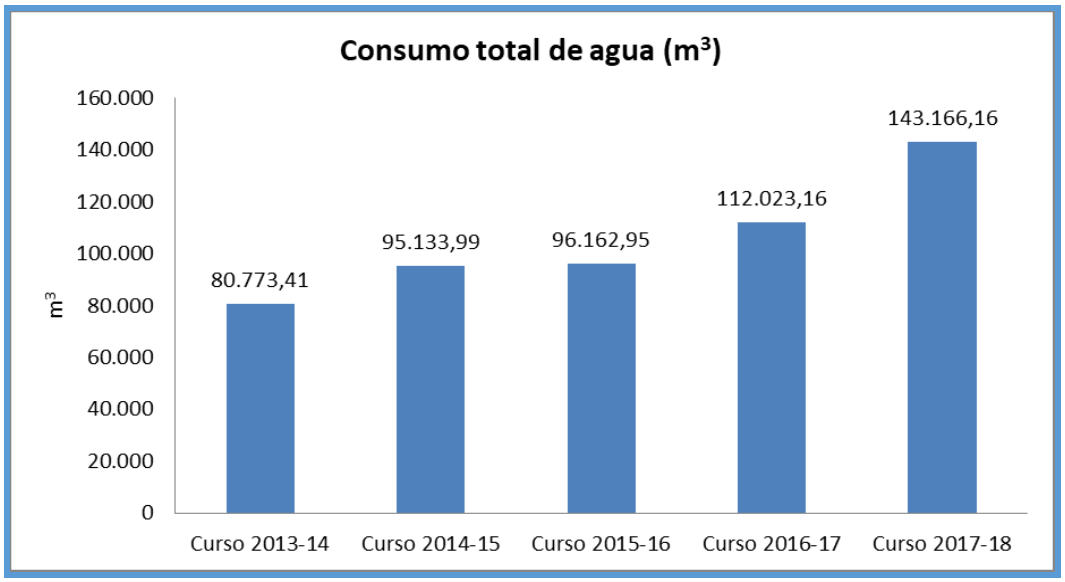
Water consumption.	2013-14	2014-15	2015-16	2016-17	2017-18
Total water consumption (m^3)	4,953.3	5,064.68	5,462.52	4,734.85	3,424.46
Total well water consumption (m^3)	75,820.1	90,069.3	90,700.43	107,288.31	139,741.70
Total water consumption (m^3)	80,773.4	95,133.9	96,162.95	112,023.16	143,166.16
Ratio of water consumption (m^3/persona)	69.10	78.50	78.49	91.45	111.67

Table 19: Water consumption.

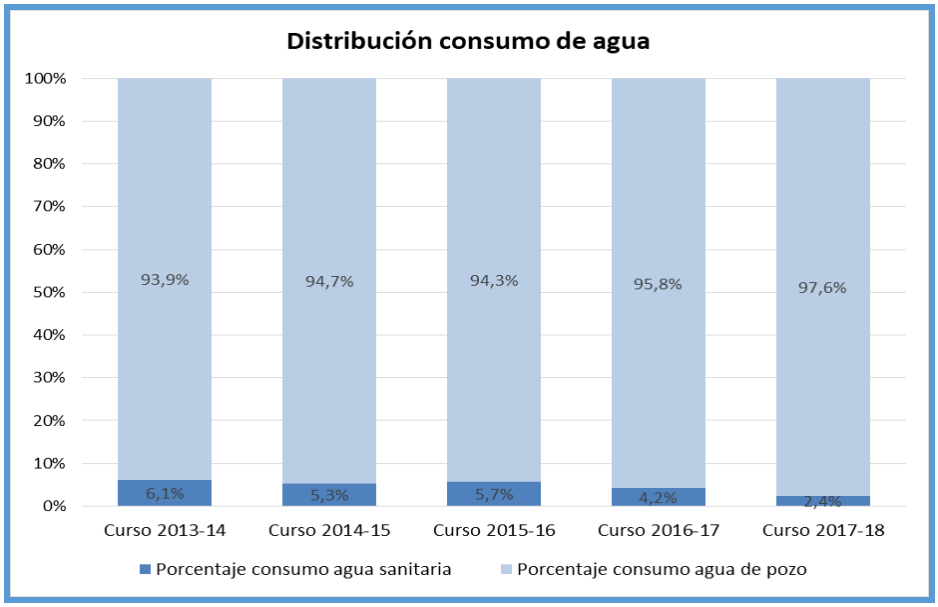
It is worth mentioning that the water meter of the Students Hub has not worked correctly for six months. The average annual water consumption in this building corresponds to 7% of the sanitary water consumed and 0.18% of the total water consumption of the University. The consumption of sanitary water continues with a downward trend over the last two years, which is related to improvements made in the sanitary systems in the Rectorado and Jalón Ángel buildings. However, the consumption of well water has increased, mainly due to the opening of the Student Hub and the weather conditions this year.



Graph 9: water consumption per person



Graph 10: total water consumption



Graph 11: water consumption distribution

The well water collection, which is used in the cooling system, accounts for 97% of the water used in the University. The water collected is returned in its entirety, without chemical changes in its composition to the aquifer through a well. USJ is authorised to gather 450,278 m3 per year, and it is observed that the annual well water consumption is well below the authorised limit.

Regarding the University's water cycle, sanitary water effluents are discharged into the municipal sanitation network. San Jorge University complies with the obligations set forth in the regulations on health discharges.

6.4. Material consumption

The materials used are those necessary to teach in the different specialities of the centres. The most important raw materials are office material, paper and laboratory chemicals.

Consumption of laboratory chemicals

Chemical products	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Liquid chemical products (l)	63.38	134.92	160.48	145.61	158.90	108.86
Solid chemical products (tonnes)	0.01	0.02	0.03	0.03	0.02	0.05

Table 20: chemical products.

Image 12: Faculty of Health Sciences laboratory.

University laboratories are characterised by a large number of chemical products, although small quantities of each are used throughout the academic year. That is why the data is shown aggregated by typology (solid or liquid). In the case of liquids, the litre unit is used, since it groups together different products each with a different density.

The consumption of laboratory products had been increasing over the years due to an increase in the number of undergraduate, master's and doctorate students who use these facilities. In the last year, the amount of liquid chemicals used has decreased, while the consumption of solid

products has increased. This variability depends on the different practices and research activities that take place in the laboratories of the Faculty of Health Sciences.

Consumption of office supplies

Consumption of office supplies	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Paper consumption (t)	3.27	8.75	6.09	5.93	4.99	4.93
Toner consumption (t)	SD	SD	0.047	0.035	0.047	0.048
Ink consumption (t)	SD	SD	0.00035	0.00035	0.00042	0.0004

Table 21: Consumption of office supplies

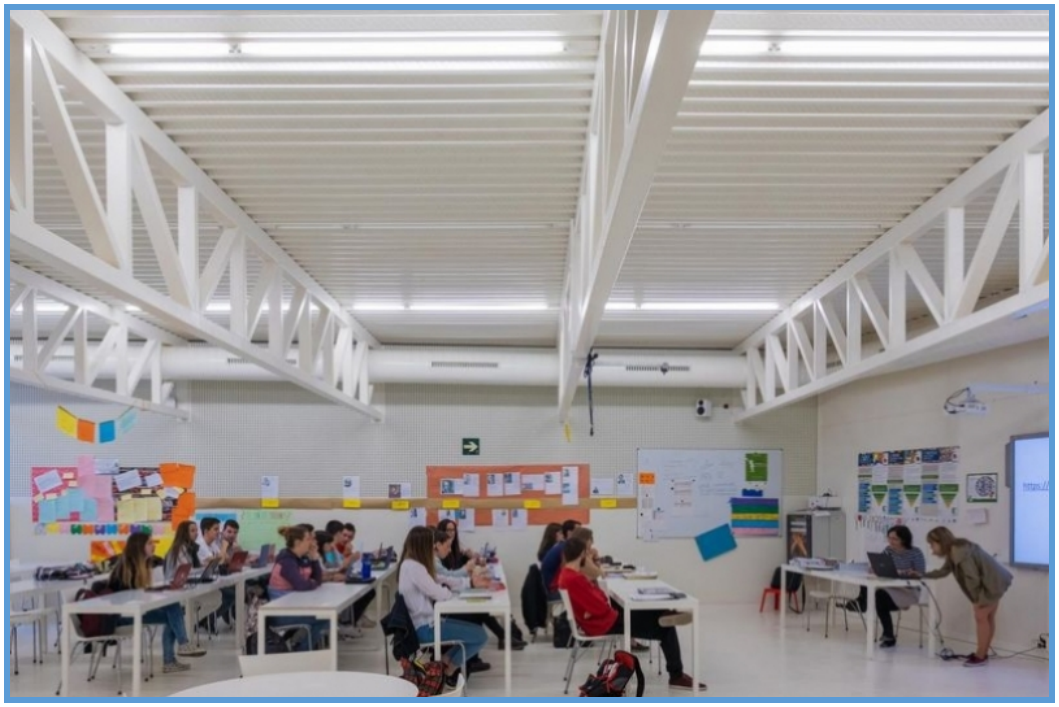


Image 13: degree in Pre-school education degree

Phytosanitary product consumption

Since 2015-16, the University has been managing the green areas of the university campus. Phytosanitary products are used for its proper maintenance.

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Phytosanitary product consumption (t)	0	0	0	0.038	0.063	0.033

Table 22: Phytosanitary consumption.

Image 14: green areas

Ratio of material consumption per person

Material consumption ratio	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Liquid chemical product consumption (l/person)	0.06	0.12	0.13	0.12	0.13	0.08
Solid chemical product consumption (l/person)	1.34E-05	1.36E-05	2.47E-05	2.17E-05	1.55E-05	3.87E-05
Paper consumption (t/person)	0.003	0.007	0.005	0.005	0.004	0.004
Toner consumption (t/person)	SD	SD	3.90E-05	2.87E-05	3.86E-05	3.78E-05
Ink consumption (t/person)	SD	SD	2.89E-07	2.86E-07	3.43E-07	3.28E-07
Phytosanitary consumption (t/person)	0	0	0	3.108E-05	5.107E-05	2.55E-05

Table 23: Ratio of material consumption

6.5. Waste generation

For correct waste management, San Jorge University has containers and bins in all its facilities that allow for an adequate segregation of waste, with clean points in all buildings, thus facilitating separate collection.

Image 15: separate collection clean point

In the case of hazardous waste, there is a temporary warehouse for hazardous waste with all measures to avoid the risk of environmental contamination, in addition to other areas conditioned in the laboratories of the Faculty of Health Sciences for their intermediate storage. Subsequently, waste management is carried out through authorised transporters and managers.

Image 16: Hazardous waste management in the laboratory of the Faculty of Health Sciences.

San Jorge University has generated a total of 45.62 tons of waste in 2017-18 academic year, of which 95.2% were non-hazardous waste.

Waste	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Total hazardous waste (t)	2.47	1.60	1.93	1.83	1.29	2.17
Total non-hazardous waste (t)	SD	13.45	14.38	33.04	34.43	43.48
Total waste (t)	2.47	15.05	16.30	34.87	35.72	45.65

Table 24: waste.

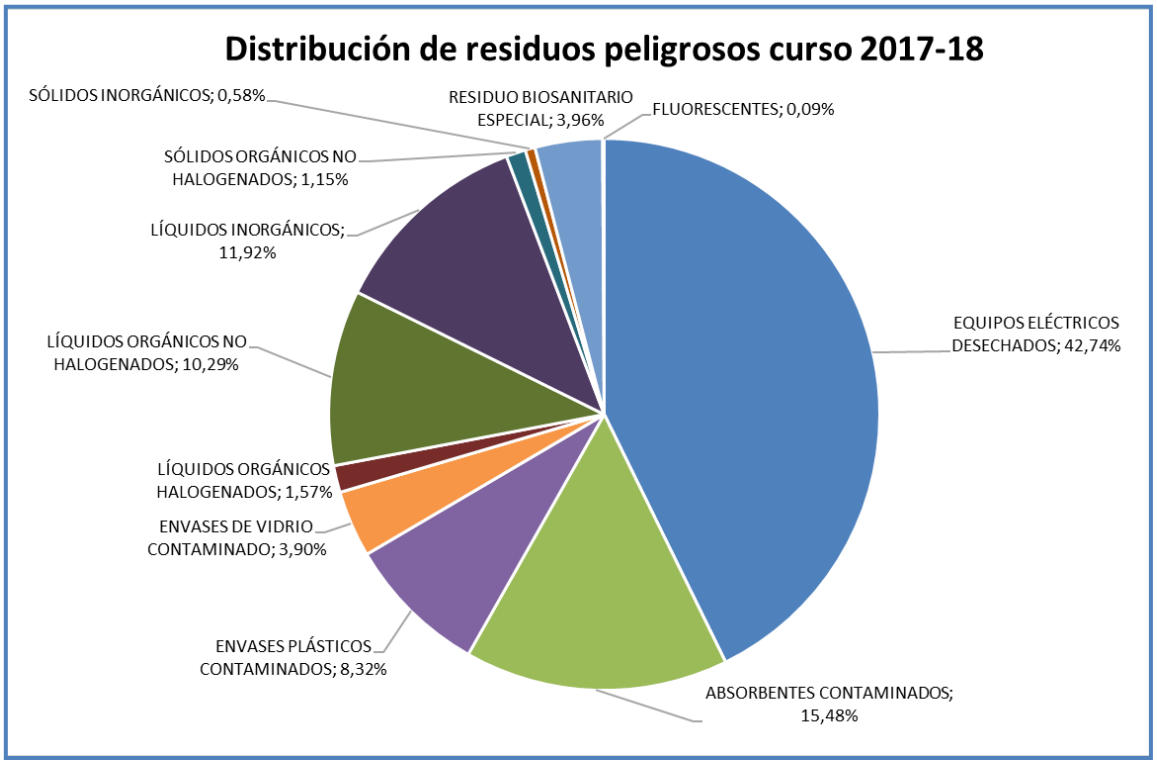
During this year, there has been an increase in the generated waste, both hazardous and non-hazardous. In the case of hazardous waste, the increase is due to the fact that during this year, heavy electrical and electronic equipment (SAIS) and a large number of unused laptops have been managed. Regarding the hazardous waste produced in the laboratory, the quantity remains similar to last year.

Waste ratio per person	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Waste ratio per person	2.29	1.37	1.59	1.49	1.05	1.69
Non-hazardous waste ratio (kg/person)	sd	11.51	11.86	26.97	28.11	33.91
Waste ratio (kg/person)	2.29	12.88	13.45	28.46	29.16	35.61

Table 25: waste ratio.

Hazardous waste

During the 2017-18 academic year, a total of 2.17 tons of hazardous waste were generated, from 11 different types of waste. This distribution is very different from that of previous years, and shows that the electronic equipment discarded is generated in greater quantity (42.74%), followed by contaminated absorbent (15.48%), inorganic liquids (11.92%), organic liquids (10.29%), and contaminated plastic containers (8.32%).



Graph 17: distribution of hazardous waste 2017-18.

The hazardous waste managed during the 2017-18 academic year are:

Hazardous waste (kg)		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
20 01 35*	Discarded electrical equipment	252	30	0	57.40	0.10	928.00
16 06 02*	NiCd batteries	0	5.00	20.00	33.00	30.00	0.00
15 02 02*	Contaminated absorbents	969	447	610	548.50	254.70	336.15
15 01 10*	Contaminated plastic containers	64	57	50	34.60	107.90	180.75
15 01 10*	Contaminated metallic containers	10	0	0	4.60	0.00	0.00
15 01 10*	Contaminated glass containers	180	106	199	99.60	103.55	84.75
15 01 10*	Phytosanitary containers	0	0	0	4.40	8.29	0.00
16 05 08*	Halogenated organic liquids	57	0	45	69.00	18.00	34.15
16 05 08*	Non-halogenated organic liquids	105	246	213	364.10	339.50	223.40

Hazardous waste (kg)		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
16 05 07*	Inorganic liquids	617	399	466	435.90	307.10	258.88
16 05 08*	Non-halogenated organic solids	0	0	0	10.00	0.00	24.90
16 05 07*	Inorganic solids	6	39	10	0.00	9.60	12.50
18 01 03*	Special biosanitary waste	172	239	282	171.10	91.40	85.90
20 01 21*	Fluorescents	0	10	30	0	18.00	2.00
16 06 01*	Pb batteries	0	15	0	0	0.00	0.00
16 06 13*	Waste batteries	38	10	0	0	0.00	0.00
Total hazardous waste (kg)		2,470	1,603	1,925	1,832.20	1,288.14	2,171.38

Table 26: hazardous waste.

Ratio of hazardous waste per person (per type of waste)

Hazardous waste ratio (kg/person)		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
20 01 35*	Discarded electrical equipment	0.23	0.03	0.00	0.047	0.00	0.72
16 06 02*	NiCd batteries	0	0.001	0.02	0.027	0.02	0.00
15 02 02*	Contaminated absorbents	0.90	0.38	0.50	0.448	0.21	0.26
15 01 10*	Contaminated plastic containers	0.06	0.05	0.04	0.028	0.09	0.14
15 01 10*	Contaminated metallic containers	0.01	0.00	0.00	0.004	0.00	0.00
15 01 10*	Contaminated glass containers	0.17	0.09	0.16	0.081	0.08	0.07
15 01 10*	Phytosanitary containers	0	0	0	0.004	0.01	0.00
16 05 08*	Halogenated organic liquids	0.05	0.00	0.04	0.056	0.01	0.03
16 05 08*	Non-halogenated organic liquids	0.10	0.21	0.18	0.297	0.28	0.17
16 05 07*	Inorganic liquids	0.57	0.34	0.38	0.356	0.25	0.20
16 05 08*	Non-halogenated organic solids	0	0	0	0.008	0.00	0.02
16 05 07*	Inorganic solids	0.01	0.03	0.01	0	0.01	0.01
18 01 03*	Special biosanitary waste	0.16	0.20	0.23	0.140	0.07	0.07
20 01 21*	Fluorescents	0	0.01	0.02	0	0.01	0.00
16 06 01*	Pb batteries	0	0.01	0	0	0.00	0.00
16 06 13*	Waste batteries	0.00	0.01	0	0	0.00	0.00
TOTAL RP (kg/ person)		2.29	1.37	1.59	1.496	1.05	1.69

Table 27: hazardous waste ratio.

Non-hazardous waste

Regarding non-hazardous waste, 43.48 tons were generated in the 2017-18 academic year. 50% corresponds to the remains of pruning and grass generated in the maintenance of the green areas and later used for compost, 43% to the waste paper and cardboard sent to recycle and 7% to urban furniture.

Non-hazardous waste (kg)		2013-14	2014-15	2015-16	2016-17	2017-18
(+34) 20 01 01	Paper and cardboard	13,140	14,140.00	17,500.00	18,470.00	18,890.00
20 01 36	Discarded non-hazardous electrical and electronic equipment	300	230.00	419.00	740.00	0.00
20 03 99	Waste writing material	10.5	5.35	7.00	0.00	14.00
08 03 18	Toner	SD	19.35	14.40	19.35	19.80
08 03 13	Ink	SD	0.25	0.25	0.30	0.30
20 02 01	Biodegradable waste. Pruning and grass waste	0	0	15,100.00	15,000	21,600
16 02 16	Wires	0	0	0	200	59.00
16 06 05	Lithium-ion batteries					13.00
15 01 06	Urban furniture					2,880.00
Total non-hazardous waste (kg)		13,450.5	14,394.95	33,040.65	34,229.65	43,476.10

Table 28: non-hazardous waste.

Ratio of non-hazardous waste per person (per type of waste)

Non-hazardous waste ratio (kg/person)		2013-14	2014-15	2015-16	2016-17	2017-18
20 01 01	Paper and cardboard	11.51	11.67	14.28	15.08	14.73
20 01 36	Discarded non-hazardous electrical and electronic equipment	0.26	0.19	0.34	0.60	0.00
20 03 99	Waste writing material	0.01	0.004	0.006	0.00	0.01
08 03 18	Toner	SD	0.02	0.01	0.02	0.02
08 03 13	Ink	SD	0.0002	0.0002	0.00	0.00
20 02 01	Biodegradable waste. Pruning and grass waste	0	0	12.326	12.25	16.85
16 02 16	Wires	0	0	0	0.16	0.05
16 06 05	Lithium-ion batteries	0	0	0	0	0.01
15 01 06	Urban furniture	0	0	0	0	2.25
TOTAL RNP (kg/ person)		11.77	11.86	26.97	28.11	33.91

Table 29: hazardous waste ratio.

6.6. Atmospheric emissions

According to the catalogue of potentially polluting activities in the atmosphere, CAPCA-2010; emissions produced by USJ can be categorised as follows: *Non-industrial combustion plants: Commercial and Institutional 02 01 03 03, combustion boilers for activities specified in the previous section of nominal thermal power <2.3 MWt.*

The University has two heating boilers located in the Faculty of Health Sciences. The smoke evacuation is carried out by two chimneys. These foci, not assigned to any group of the Catalogue of Potentially Contaminating Activities of the Atmosphere (A, B or C), are governed by Royal Decree 1027/2007, of 20 July, which approves the Regulation of Thermal Installations in Buildings, and as established in IT3. The results of these reviews are satisfactory and within the limits set by said royal decree.

CO2 emissions have been calculated. Direct emissions (scope 1) and indirect emissions (scope 2) are included, using the conversion factors that appear in the Organisational Carbon Footprint Calculator. Scope 1 + 2, of the Ministry of Agriculture, Food and Environment, version 11.

Scope	Emission source	Conversion factor						Measurement unit
		2012	2013	2014	2015	2016	2017	
Scope 1 (direct emissions)	Natural gas	0.202	0.202	0.202	0.253	0.202	0.203	kg CO_2/KWh
	Heating oil	2.786	2.786	2.786	2.828	2.868	2.868	kg CO_2/l
Scope 2 (indirect emissions)	Electricity	0.370	0.170	0.190	0.230	0.240	0.250 0.390	kg CO_2/KWh

Table 30: conversion factors of fuels and electricity

The annual direct and indirect greenhouse gas emissions at San Jorge University are:

CO_2 EMISSIONS	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Scope 1 direct emissions (t CO_2)	146.16	131.97	126.66	156.60	127.76	153.51
Scope 2 direct emissions (t CO_2)	690.45	322.53	391.23	438.26	505.47	589.62
Total (scope 1 + scope 2) (t CO_2)	836.61	454.50	517.89	594.85	633.24	743.62
Emissions per person (t CO_2/person)	0.77	0.39	0.43	0.49	0.52	0.58

Table 31: $CO_{2.\ emissions}$

The total annual emissions of SO2, NOx and PM10 generated in the combustion of natural gas boilers and heating oil generators have been calculated. To do so, the emission factors of combustion processes for boilers and burners with a nominal power of less than 50 MW,

established in the National Inventory of Greenhouse Gases, edition 2016, have been taken into account.

EMISSION FACTOR	SO_2 (g/GJ)	NO_x (g/GJ)	PM_{10} (g/GJ)
Natural gas	0.372	100.00	0.78
Diesel	94.30	89.00	3.14

Table 32: emission factors of fuels and electricity

The total emissions of SO2, NOx and PM10 generated by the combustion processes are displayed in the following table.

TOTAL EMISSIONS	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
SO_2 (kg/GJ)	1.01	0.91	0.88	0.87	0.88	1.01
NO_x (kg/GJ)	260.46	235.18	225.71	222.81	227.68	272.19
PM_{10} (kg/GJ)	2.03	1.84	1.76	1.74	1.78	2.12

Table 33: total annual emissions of SO2 NOx and PM10 from combustion processes.

6.7. Biodiversity

The total area occupied by San Jorge University is 90,342 m2 and the sealed surface amounts to 16,230.74 m2.

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Sealed surface (m^2)	15,180.52	15,180.52	15,180.52	15,180.52	16,230.74	16,230.74
Surface per person (m^2)	14.05	12.99	12.53	12.39	13.25	12.66

Table 34: Biodiversity.

The construction of the Student Hub in the 2016-17 academic year generated an increase in the constructed sealed surface, which modified the biodiversity indicator last year. In this last year, the indicator has decreased due to the increase in the number of people.

6.8. Mobility

The geographical location of the San Jorge University campus, in the town of Villanueva de Gállego, is a determining factor in the daily mobility of the university community, which mainly resides in the city of Zaragoza.

To promote sustainable mobility, the University has a collective transport service, which covers the main needs of students to access the campus. This service is organised into three routes through different areas of the city of Zaragoza and a circular service.

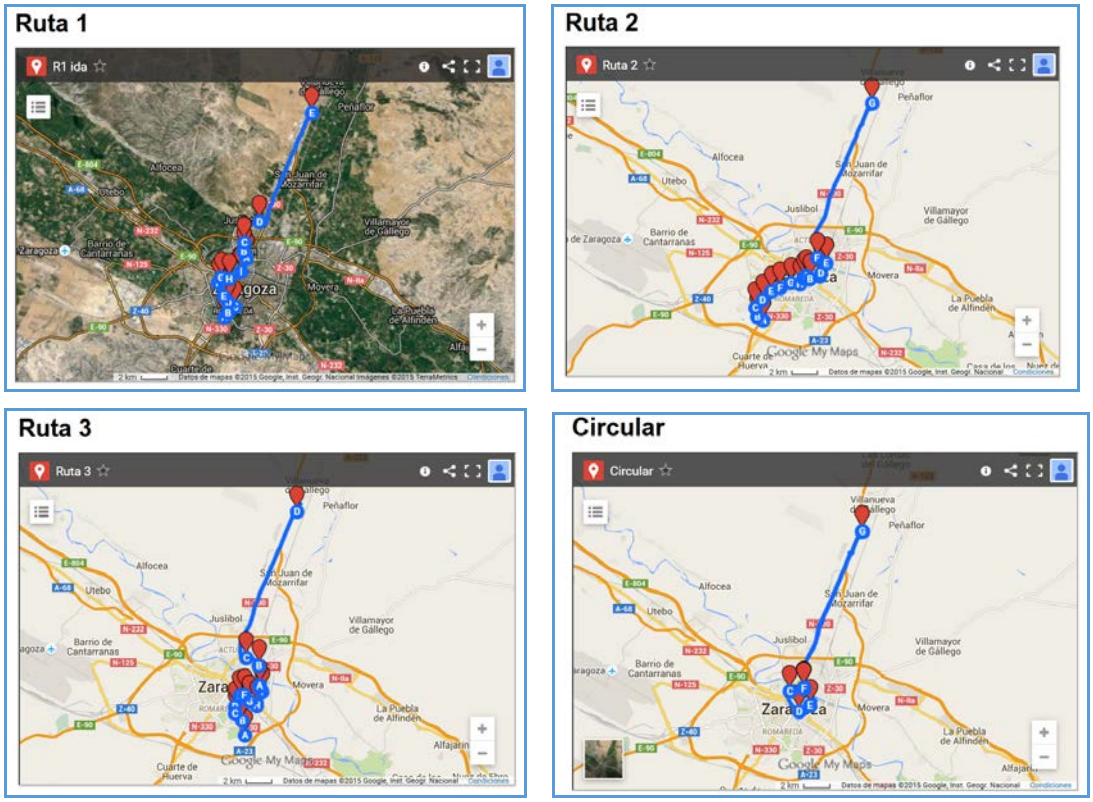


Image 18: transport service routes

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
No. of users of bus service	620	615	620	690	650	650
Annual kilometres travelled (estimated)	94,143	87,775	102,465	105,900	103,231	105,000

Table 35: transport service users

CO2 emissions generated in the transport service have been calculated, taking into account the annual kilometres travelled and the type of the vehicle, according to the emission factors established by the Oficina Catalana del Canvi Climàtic in the "Guia pràctica per al càlcul d'emissions de gasos amb efecte d'hivernacle" which are specified in the following table:

Emission source	Conversion factor						Measurement unit
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
Bus	0.588	0.588	0.588	0.557	0.662	0.666	Kg CO_2/km

Table 36: emission factor for bus transportation

Bus transportation	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Emissions CO_2 (t CO_2)	55.40	51.65	60.30	59.01	68.31	69.93
CO_2 emissions ratio (t $CO_{2/user}$)	0.09	0.08	0.10	0.09	0.11	0.11

Table 37: transport service CO_2 emissions

Although the number of users who cycle to access the campus is a minority due mainly to the fact that the majority of the university community resides in Zaragoza, last year, there was an increase in the use of this means of transport by students and workers who reside in the town of Villanueva de Gállego.

Image 19: use of bicycle.

6.9. Carbon Footprint

The Carbon Footprint (CF) is an "indicator of the total Greenhouse Gases (GHG) emitted by direct or indirect effect of an individual, organisation, event or product" (UK Carbon Trust 2008).

San Jorge University aims to calculate the carbon footprint in order to find out the global CO2 emissions and identify those emission sources with the greatest reduction potential in order to establish specific improvement actions aimed at reducing the carbon footprint.

Following the publication of Royal Decree 163/2014, of 14 March, which creates the carbon footprint registry, compensation and carbon dioxide absorption projects, the Ministry of Agriculture, Food and Environment has developed the Carbon Footprint tool of an organisation. Scope 1 + 2 to facilitate the calculation for organisations. This is why the University has also calculated its carbon footprint with this tool, in order to register in the Ministry's record.

Image 5: carbon footprint calculation stamps.

Using the "Carbon footprint tool of an organisation, Scope 1 + 2" version 11, of the Ministry of Agriculture, Food and Environment, the following results have been obtained for the Carbon Footprint indicator for 2017. Direct emissions (scope 1) and indirect emissions (scope 2) are included.

Image 20: results report of the calculation of the carbon footprint 2017.

Carbon footprint (scope 1 +2)	2012	2013	2014	2015	2016	2017
Carbon footprint (t CO_2)	830.36	556.39	446.80	633.70	599.80	712.78

Carbon footprint ratio (t CO2/person equivalent)	0.77	0.48	0.39	0.52	0.49	0.56

Table 38: carbon footprint calculation results

The carbon footprint for 2017 has increased due to the increase in energy consumption and the fact that the emission factors of electric power have also increased.

7. COMPLIANCE WITH ENVIRONMENTAL LEGISLATION

San Jorge University identifies the applicable environmental legal requirements and analyses their compliance every six months. In this way the updated status of the legislation and compliance with the applicable requirements related to the environmental aspects of the University is guaranteed.

The main environmental requirements regarding authorisations and permits are presented in the following table.

Legislation of application, authorisations and permits.	
Start-up license	
Start-up license in operation of the Rectorado Building and Faculty of Communication activity Date 22/12/2010	Law 7/2006, of June 22, on environmental protection of Aragon (repealed). Law 11/2014, of 4 December, on Prevention and Environmental Protection of Aragon.
Opening license of establishment Faculty of Health Sciences. Town Council Villanueva de Gállego. Date 01/02/2010	
License to open an establishment for the implementation and activity of the classroom, library and general services of the University Campus and planning permission for the construction of a building on the University Campus. Date 16/03/2016	
Conformity to the opening license of an establishment for the implementation and activity of the classroom, library and general services of the University Campus. Date 04/05/2016 Notes and compliance. 20/10/2018	
Hazardous waste	
Resolution of 02 February 2018 of the Aragon Institute of Environmental Management by modifying the registration in the Register of Small Producers of Hazardous Waste of the CCAA of Aragon to the San Jorge University Foundation for its centre located in Villanueva de Gállego (Zaragoza), Registration Number: AR / PP-8977.	Law 22/2011, of 28 July, on waste and contaminated soils. Decree 29/1995, of management of sanitary waste in the Autonomous Community of Aragon. Royal Decree 180/2015, of 13 March, which regulates the transfer of waste within the territory of the State. Decree 236/2005, of 22 November, of the Government of Aragon, which approves the Regulation on the production, possession and management of hazardous waste and the legal regime of the public service for the disposal of hazardous waste in the Community
Concession of groundwater.	
Resolution. Authorisation to exploit the use of public waters derived from three wells located in El Olivar. 1/12/2011.	Royal Decree 1514/2009, of 2 October, which regulates the protection of groundwater against pollution and deterioration.

Legislation of application, authorisations and permits.	
Resolution of change of ownership of an underground water use registered in section A of the water register to the City Council of Villanueva de Gállego. 13/04/2018.	
Wastewater discharge	
Authorisation for discharging sanitary water Town Council of Villanueva. 06/10/2011.	Decree 38/2004, of 24 February, of the Government of Aragon by which the wastewater regulation is approved to the municipal sewerage networks.
Authorisation for discharging sanitary water Student Hub. 23/10/2017.	
Energy Efficiency	
Resolution of 6 July, 2017 of the General Directorate of Energy and Mines, through which the certificate with file number 66490 and registration number 2017ZPTE-44344 is inscribed in the first section of the Energy Efficiency Building Certification Register.	Royal Decree 235/2013, of 5 April, which approves the basic procedure for the certification of the energy efficiency of buildings.
Voluntary commitments	
Registration in the Voluntary Registry of Entities Adhered to the Aragonese Strategy of Climate Change and Clean Energies (EACCEL). Level 2, Accession through the Action Plan. 18/10/2013.	DECREE 200/2009, of 17 November, of the Government of Aragon, by which the Voluntary Registry of Entities Adhered to the Aragonese Strategy of Climate Change and Clean Energies (EACCEL) is created.
Registration in the Register of Entities Adhering to the Aragonese Strategy for Environmental Education (EAREA) 05/21/2009.	DECREE 70/2003, of 8 April, of the Government of Aragon, by which the Register of Entities Adhered to the Aragonese Strategy of Environmental Education (EAREA) is created.
Registration of the Community Environmental Management and Audit System (EMAS) with the number ES-AR-0000025, according to the resolution dated 5 May, 2016, valid until 30 April, 2019.	REGULATION (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 concerning the voluntary participation of organisations in a Community system for environmental management and auditing (EMAS), and repealing the Regulation (EC)) No 761/2001 and Decisions 2001/681 / EC and 2006/193/ EC of the Commission.
Carbon footprint registration, compensation and CO2 absorption projects of the Ministry of Agriculture, Food and Environment. Years of calculation 2012, 2013 and 2014. Registration date 02/23/2016. Carbon footprint registration, calculation and reduction of CO2 emissions year 2015. Registration date 03/14/2017. Carbon footprint registration, compensation and CO2 absorption projects of the Ministry of Agriculture, Food and Environment. 2016 06/03/2018	Royal Decree 163/2014, of 14 March, which creates the carbon footprint record, compensation and carbon dioxide absorption projects.

Table 39: legislation and authorisations.

During the 2017-18 academic year, new environmental application requirements derived from the publication of new legal provisions have been identified.

Environmental aspect	Document	Observations
ENVIRONMENTAL RESPONSIBILITY ACTIVITY	Order APM/1040/2017, of 23 October, by which the date is established from which the constitution of the obligatory financial guarantee will be required.	Informative.
SOILS	Order PRA / 1080/2017, of 2 November, which modifies the annex I of Royal Decree 9/2005, of 14 January, which establishes the list of potentially polluting activities of the soil.	Informative.
EMAS	COMMISSION DECISION (EU) 2017/2285 of 6 December 2017 amending the User's Guide which contains the necessary steps to participate in EMAS under Regulation (EC) No 1221/2009 of the European Parliament European.	Regarding the content of the environmental declaration.
EMISSIONS	Royal Decree 1042/2017, of 22 December, on the limitation of emissions to the atmosphere of certain pollutants from medium combustion facilities and by which Annex IV of Law 34/2007 of 15 November, of air quality and protection of the atmosphere.	The catalogue of potentially polluting activities in the atmosphere is modified. Obligations to control emissions in combustion installations of nominal thermal power equal to or greater than 1MV and less than 50 MV are established. Application from 12/2028 for existing installations.
CONSTRUCTION	ORDER EIE / 418/2018, of 23 February, which regulates the registration procedures in the Register of Certification of Energy Efficiency of Buildings of the Autonomous Community of Aragon and its electronic processing.	Informative.
MSICELLANEOUS	Royal Decree 293/2018, of 18 May, on reducing the consumption of plastic bags and creating the Producers' Registry.	Informative.
WASTE	DIRECTIVE (EU) 2018/851 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2018 amending Directive 2008/98/EC on waste.	Informative.
WASTE	DIRECTIVE (EU) 2018/850 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2018 amending Directive 1999/31/EC on waste disposal.	Informative.
WASTE	DIRECTIVE (EU) 2018/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste.	Informative.
CONSTRUCTION	DIRECTIVE (EU) 2018/844 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2018 amending Directive 2010/31 / EU on the energy performance of buildings and Directive 2012/27 / EU on the energy efficiency of buildings, and 2012/27 / EU, relating to energy efficiency.	Informative.

Table 40: new legal requirements

The legal requirements and other application requirements are considered fulfilled, as reflected in the evaluation of legal compliance.

In relation to the concession for the collection of groundwater, the ownership has been changed, passing to Villanueva de Gállego Town Council, with San Jorge University becoming the user thereof. During 2017-18, the procedure for the discharge of the well water continues.

8. OTHER FACTORS

8.1. Postgraduate studies

San Jorge University, in its environmental commitment, offers a series of postgraduate studies that develop skills related to environmental improvement and sustainability in students.

Master's Degree in Environmental Management for Business

The Master's Degree in Environmental Management for Business is a title designed to train professionals in the management of all environmental aspects that affect organisations, responding to regulatory requirements and identifying improvements in processes and products based on eco-innovation, energy efficiency and cost savings, as well as in the detection of new business opportunities based on sustainability.

PhD IN THE ENVIRONMENT

This is a comprehensive proposal to different disciplines for research into all environmental areas: methodological, technological and management, which includes the identification, control and prevention of environmental impacts generated on water, soil, air, health and living things. We have lines of research on the detection, evaluation and control of local pollution as well as the study of global impact such as climate change. Process optimisation and economic activities through the study of Life Cycle Analysis and environmental costs and energy efficiency are our research objectives in the proposed transfer to companies. The theses completed to date are detailed below.

Thesis title	Author	Date
Effects of meteorological variability and climate change on ski tourism in the Spanish central Pyrenees and Andorra.	María Gilaberte	16/02/2018
Ecotoxicological characterisation of new solvents derived from glycerol	Eduardo Perales	16/11/2017
Analysis of the impacts of global change on the metabolism and eco-toxicity of river communities in the River Ebro basin.	Jonatan Val	24/03/2017
Biodiversity and functionality of natural and restored aquatic ecosystems of the floodplain of the middle section of the River Ebro.	Cecilia Español	26/01/2016
Development of regenerable sorbents based on gold supported on carbonaceous material for the retention of mercury.	Diego Ballestero	18/12/2015

Study of the effects of extreme temperatures on daily mortality in Aragon, during the period 1987-2006 as a basis for estimating the possible impact of climate change on mortality due to extreme temperatures, applying climatic scenarios.	Esther Roldán	14/12/2015
Physicochemical and ecotoxicological characterisation of solvents from biomass.	Laura Lomba	11/04/2014
Economic evaluation of medicines. Cost-effectiveness study, economic and environmental impact of antagonist drugs of tumour necrosis factor alpha.	Alejandro González	19/11/2013
Development of activated carbons from lignocellulosic residues for the adsorption and recovery of toluene and n-hexane.	Alicia Martínez de Yuso	20/12/2012

Table 41: Doctorate thesis

8.2. Research groups

The University has two research groups on the environment, with 14 participating researchers.

GREENLIFE: The main objective of GREENLIFE is to study in-depth the knowledge of the physical, chemical and environmental properties of green solvents and other chemical substances of interest, so that the results allow to ensure their environmental goodness and facilitate their applicability. Supported by the main premise of Green Chemistry, our results can be used to design "on demand" similar compounds that maintain their applications but minimise environmental risk.

ECO2CHEM was born with the maximum of investigating the environment from all its aspects: methodological, technological and management. In this sense, we are a multidisciplinary team with the capacity to address environmental problems and propose integral solutions from different professional perspectives. We innovate in order to anticipate the needs of the company with regard to environmental issues and we strive to achieve sustainability.

8.3. Training and environmental awareness in degree programmes

The environmental policy of the University is committed to "raising awareness and educating the student on the environmental aspects and impacts derived both from their current training activity and future professional activity". Following this policy, the University created in 2011 the Greencampus office, an initiative to encourage a sustainable campus and university community that are sensitive to the environment. One of its goals is to: "Integrate elements of environmental awareness and training into all official degree programmes to develop in the student skills and values that the student can apply in the development of their future professional activity"

The environmental issues addressed in the different degrees are waste management, environment and health, climate change, environmental management, sustainability, green economy and good environmental practices.

8.4. Online training

San Jorge University has carried out the MOOC "Environmental Sustainability of Organisations in the Circular Economy" on the MiriadaX platform. Two editions were held in November 2017 and May 2018. These are open, free and online courses in which more than 1000 people registered, with more than 500 students from different countries taking the course.

8.5. Information and environmental awareness

The Greencampus office participates in the welcome session for new students, presenting the activities and services related to environmental management and the environmental education and awareness that take place at San Jorge University.

Throughout the year, the Greencampus office uses different channels to inform and make the entire university community aware about environmental issues:

Website:

The San Jorge University website includes is a specific section called Greencampus, which contains the Environmental Declaration, information on environmental management, good environmental practices and information on training, volunteering and environmental research. https://www.usj.es/conoce-la-usj/green-campus

Image 21: Greencampus. website

Territorio USJ.

San Jorge University students have an online space called Territorio USJ http://www.territoriousj.es/ in which all the activities, news and features offered by the university are reported. There is a specific Greencampus Office section, which contains all the most outstanding, relevant news.

Image 22: Territorio USJ.

Social Networks

Social networks are a very powerful tool to spread the environmental message to the whole society, so it was considered appropriate to have a Twitter profile with the aim of offering a complementary channel of the dissemination of our activities, news and data related to the environment and promote communication with other entities, universities and people interested in the environment.

Image 23: Greencampus. twitter profile

8.6. Participation in environmental initiatives

Registration in the Voluntary Registry of Entities Adhered to the Aragonese Strategy of Climate Change and Clean Energies (EACCEL).

The University adheres to the Aragonese Strategy of Climate Change and Clean Energies (EACCEL) in level 2, Adhesion through the Action Plan since October 2013. The actions included in the action plan suppose a reduction of emissions of 7.3 tCO2 in the period 2008-12. During this course, the University has participated in the EACCEL review process by making contributions to it, participating in the workshop on education, awareness and communication.

Registration in the Voluntary Registry of Entities Adhered to the Aragonese Strategy of Climate Change and Clean Energies (EACCEL).

Since 2009, the University is registered in the Register of Entities Adhered to the Aragonese Strategy of Environmental Education. During this course the University has participated in the Meeting of the Aragonese Strategy of Environmental Education on October 19 and 20 and contributions have been made to the document "New challenges for the EÁREA. Incorporating a new look "

CRUE Sustainability

San Jorge University participates in different working groups of the CRUE Sectorial Commission Universities of Spain Sustainability, where universities collect experiences on environmental management in the campuses, advances in making the university community environmentally aware and work in risk prevention, and cooperation in these areas is encouraged for the exchange of experiences and the development of good practices. During this year, we have collaborated in the preparation of the Environmental Sustainability Diagnosis report in Spanish Universities. The results were presented at the CRUE Sustainability spring meeting.

Image 24: diagnosis of environmental sustainability in Spanish universities.

Environmental volunteering

San Jorge University is part of La RIVA (Interuniversity Network for Environmental Volunteering), a project carried out by the Participation and Volunteering Group of the CRUE Sustainability, which allows its members to disseminate volunteer actions, organise volunteer exchanges between universities and support among member universities..

As in previous years, collaborated in the Network Plantation 2017 organised by WWF in Villanueva de Gállego.

CONAMA 2018PHASE 2018

During this year, we have participated in different work meetings to prepare the National Environment Congress within the GT-19 Environmental Education Working Group, coordinated by the Conama Foundation.

#PorElClima

San Jorge University belongs to the Community for Climate, convinced that it is necessary to act with a commitment of action to fight against climate change. During this year, the #CuidamosCadaGota campaign was disseminated to inform and raise awareness about issues related to water saving through different monthly challenges

Image 25: #CadaGotaCuenta campaign.

9. DEADLINE FOR THE NEXT ENVIRONMENTAL STATEMENT

Complying with Regulations (EC) No. 1221/2009 and (EU) 2017/1505, which allows organisations to voluntarily adhere to a community environmental management and auditing system (EMAS), the following Environmental Declaration will be written during the third quarter of 2019, containing the developments included during the 2018-19 academic year.

For any questions regarding the content of this statement, you can contact us by writing to the email address: greencampus@usj.es or at the USJ phone number: +34 976 060 100*

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Autovía A-23 Zaragoza-Huesca Km. 510
50,830 Villanueva de Gállego (Zaragoza)

10. VALIDATION

ENVIRONMENTAL STATEMENT VALIDATED BY

AENOR

IN ACCORDANCE WITH REGULATION (EC) No. 1221/2009:
modified according to REGULATION (EU) 2017/1505

NO. OF ACCREDITATION AS AN ENVIRONMENTAL AUDITOR
ES-V-0001

Date of validation: