



University of Girona
Greening Plan

**TECHNICAL REVIEW COMMISSION OF THE
GREENING PLAN
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**Universitat
de Girona**



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1. INTRODUCTION

Since its inception 30 years ago, the University of Girona (UdG) has shown remarkable environmental sensitivity and a strong commitment to social, environmental and territorial justice. Numerous research groups, studies, institutes, chairs, campuses and associations have focused their activities on improving the environment and created and disseminated knowledge in that regard. A pioneering example of the institution's environmental responsibility was the [Strategic Greening Plan](#), developed in 1998/99 and officially approved in 2000. It was the first plan of its kind in the entire Catalan university system, has been the institution's roadmap for more than 20 years and has placed the UdG in a leading position in the field of environmental policy management. An indicator of this is the UdG's position in the [international GreenMetric ranking](#) (2020), an initiative that promotes sustainability in higher education institutions around the world which ranks the UdG 91st out of the 912 universities analysed, and second in the Catalan sphere.

This drive of the Girona university community in favour of environmental responsibility has also featured prominently in recent times. In 2019, the [Fridays for Future](#) Girona movement was a pioneer in Spain and widely disseminated by students. The [UdG2030 Strategic Plan](#) development process, also in 2019, ensured sustainability as one of the three potential strategies for the UdG. In the vote on the three hypotheses for the Strategic Plan, the one corresponding to the issue of sustainable development was very well positioned, just behind the winning option, which was the so-called "Sum of Intelligences". Thus it was agreed that the UdG2030 Strategic Plan "Sum of Intelligences" would have a considerable sustainable development component. And a final example of the university community's involvement in protecting the environment was its call to support the [climate emergency declaration](#) approved in the summer of 2019. This statement was, in fact, the starting point for the review of the current Greening Plan to adapt it to the new and urgent social and environmental needs.

The new UdG Greening Plan is, therefore, the tool it has equipped itself with to guide its future actions in environmental and climate matters. It is formulated as a review and update of the Strategic Greening Plan approved by the Governing Council in 2000. Nevertheless, there are changes in the structure and objectives of important elements, especially those related to climate issues.

Thus, the Greening Plan derives from the climate emergency declaration approved by the UdG at the University Senate meeting held on 11 July 2019. With that approval, the following agreements were reached:

- 1. To position the UdG as an institution and approve the climate emergency declaration, with the aim of stimulating the public authorities and governments around us to take urgent measures, and to carry out actions in the University itself in the same vein.
- 2. To urge the Governing Council of the UdG to promote the immediate review of the current Strategic Greening Plan, in order to coordinate and order new measures to adapt to climate change and its mitigation.

The Governing Council, in session 7/2019 of 8 October 2019, agreed to set up the **Technical Commission for the review of the Greening Plan**, with the functions of advising on the objectives, structure, actions and general composition of the new UdG Greening Plan, and to monitor the development and performance of the actions described therein.

The Governing Council, in session 11/2019 of 13 December 2019, appointed the members of the Commission, which was composed of the following representatives:

- a) Jaume Feliu Torrent (Rector's Delegate for Territory and Sustainability)
- b) Carolina Martí Llambrich (Director of the Institute of the Environment)
- c) Sílvia Lloveras Pimentel (Head of the Social Commitment Unit)
- d) Pep Juandó Mayoral (Head of the Green Office)
- e) Joan Roca Ferrés (Head of the Technical and Maintenance Office Service)
- f) Biel Cardona Gilabert (member of the UdG Student Council)
- g) Pau Planas Puigbert (member of the UdG administration and services staff)
- h) Pere Roura Grabulosa (member of the UdG teaching and research staff)

The Technical Commission for the Review of the Greening Plan has designed and developed the draft plan presented herein. This document aims to be concise and agile, the result of a compendium of numerous documents (reports, diagnoses, reflections, actions and presentations) generated throughout the information, discussion and writing process. The extensive information generated is due in large part to the desire to open discussion of the Plan up to members of the university community. In other words, the emphasis has been on co-creation by the people who make up the University, on the sum of the intelligence of all the members of the university community.

The Plan is structured into six sections: introduction, background, design and principles, working method, current status and objectives and actions. The construction logic of the Plan, from the initial phases of gathering information and establishing principles to the final definition of actions, follows a successive sequence: basic information, central objective, areas of the Plan, lines of the Plan, operational objectives and actions.

Regarding how specific it is, the Plan goes as far as the wording of the statement of actions. The deployment, implementation and monitoring of the actions are entrusted to two bodies of the University, the Technical Commission for the Review of the Greening Plan itself and the Social Commitment Unit, specifically the Sustainability Area. The former will perform advisory, mediating and monitoring functions, while the latter will perform coordination, executive, technical and budgetary tasks.

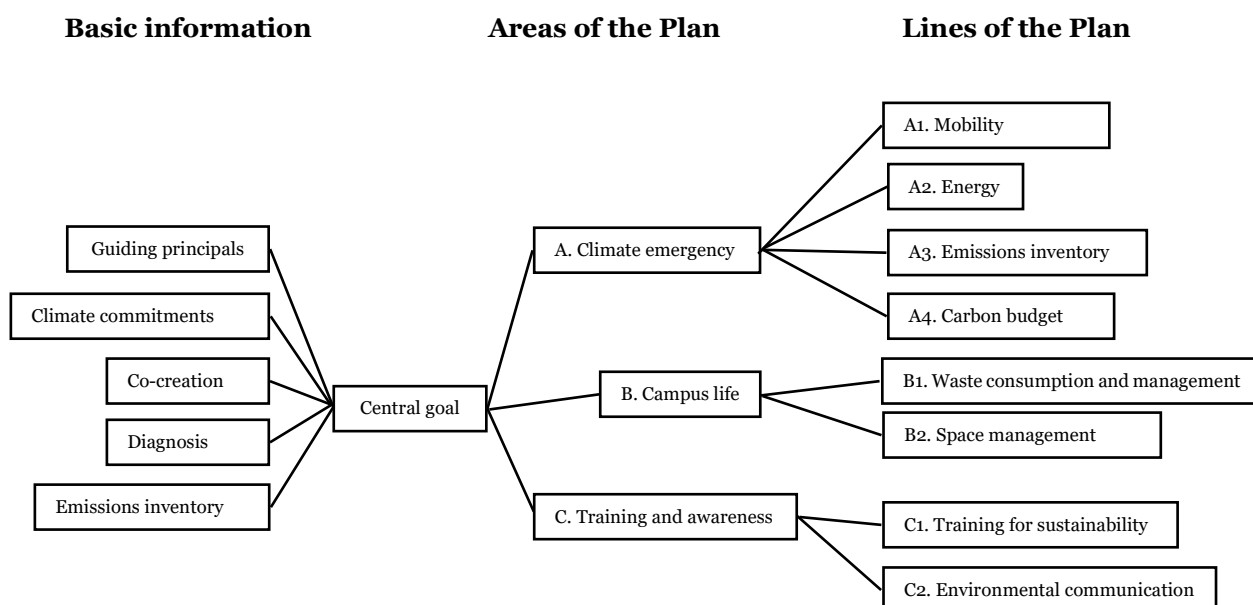


Figure 1. Structure of the 2021 Greening Plan

2. BACKGROUND

The previous UdG Strategic Greening Plan was a leading, pioneering action in the field of corporate, in this case university, environmental planning and management. It began its first actions in the 1998-99 academic year and adopted its final design the following year. In February 2000, the UdG Governing Council (then called the Governing Board) formally approved the Plan, the objectives and the guidelines, and determined the specificity of its action within the University's actions and activities.

Initially, the responsibility for the scientific monitoring and coordination of the Plan was assigned to two technical teams of the Institute of the Environment: one for campus greening and everyday life, coordinated by Dr. Josepa Bru, and the other curricular greening, coordinated by Dr. Anna Maria Geli. Even at this initial stage, the primary and secondary objectives that would later be approved were noted and the structure of what the areas of action were to be was established.

The Plan was structured into six lines: mobility, space management and adaptation, waste management, resource optimisation, curricular greening and information and awareness. It was also organised into strategic objectives, operational objectives and actions.

At that time, a structure was also created to consolidate and monitor the Plan, which was called the Green Office. The evolution in the University's organisation and structures of over the last 20 years has changed the Plan's managerial and monitoring body, which is currently the Sustainability Area of the Social Commitment Unit.

Likewise, the evolution of scientific knowledge and socio-political priorities in environmental matters has led to the need to review and design a new Greening Plan for the UdG. In particular, one of the elements that has become the central axis of environmental policies has been the fight against climate change and adaptation to its effects, principles that did not appear explicitly in the previous

plan. However, implementation of the Plan over the last 20 years has been adjusted to include these de facto principles as the main objectives to be developed.

One of the elements of scientific consensus that shows the need to review the objectives of the Greening Plan is the reports issued by the Intergovernmental Panel on Climate Change (IPCC), established in 1988 by the World Meteorological Organisation and the the United Nations Environment Programme, the international body responsible for assessing scientific knowledge on climate change.

Between 2013 and 2014, the IPCC published the documents relating to the [fifth evaluation report](#). This report shows that continued emissions of greenhouse gases (GHGs) will exacerbate global warming and cause changes in all components of the climate system, which will increase the likelihood of severe, widespread and irreversible impacts on people and ecosystems. To mitigate climate change, the report says, "it would be necessary to reduce GHG emissions substantially and sustainably. Even with decisive global action, negative impacts will be inevitable and adaptation measures will have to be taken."

In all IPCC-assessed emission scenarios, projections indicate that temperatures will continue to rise throughout the 21st century, that heat waves are more likely to be more frequent and last longer, and that episodes of extreme precipitation are more likely to be more intense and frequent in many regions. The oceans will continue to warm and acidify, and the average sea level will continue to rise.

Given these forecasts, the IPCC states that adaptation and mitigation are complementary strategies to reduce and manage the risks of climate change. If emissions are substantially reduced in the coming decades, climate risks can be reduced throughout the 21st century and subsequently improve the prospects for effective adaptation, reduce the costs and challenges of long-term mitigation, and contribute to the fact that the trajectories of sustainable development are resilient to the climate.

This scientific body reminds us that while there are many options for adaptation and mitigation, none of these options are really effective on their own. It emphasised the need for policies to be implemented on all levels and that integrated responses were needed to strengthen adaptation and mitigation with other social objectives.

The IPCC is currently working on the [sixth assessment report](#), scheduled for 2022, when the first global review of the United Nations Framework Convention on Climate Change will take place. Documents prepared and published regularly by the working groups, such as the [latest report on the scientific basis](#),

unequivocally show the need for urgent action to address the associated climate and environmental emergency.

Faced with these very serious and contrasting conclusions, societies have become increasingly aware of the need to act to save the future of the planet. In particular, at the UdG, the university community promoted the institution's climate emergency declaration, which was approved by the University Senate on 11 July 2019 (session 4/2019). This statement summarised the main elements of scientific consensus on the causes and effects of climate change and stated "the urgent need to reduce global CO₂ emissions by 45% by 2030, and to zero by 2050, to achieve an acceptable scenario of 1.5°C increase in global average temperature compared to the pre-industrial era".

In the climate emergency declaration, the University Senate established two agreements:

1. To position the UdG as an institution and approve the climate emergency declaration, with the aim of stimulating the public authorities and governments around us to take urgent measures, and to carry out actions in the University itself in the same vein.
2. To urge the Governing Council of the UdG to promote the immediate review of the current Strategic Greening Plan, in order to coordinate and order new measures to adapt to climate change and its mitigation.

The Governing Council, in session 7/2019 of 8 October 2019, agreed on the creation of the Technical Commission for the Review of the Environment Plan, with the functions of advising on the objectives, structure, actions and general composition of the new Plan. Finally, the Governing Council, in session 11/2019 of 13 December 2019, appointed the members of the Commission.

The Commission began review work in 2020 but it was precisely at the beginning of 2020 that society was hit by the Covid-19 pandemic, on a global and local scale. This significantly affected the process of drawing up the Plan in terms of attendance at meetings and working sessions.

In fact, the impact of the pandemic has not only led to changes in the way classes and meetings are held, it has also had a real social impact on the way teaching, work and mobility are organised. After months of pandemic, we now see possible actions and policies that seemed unlikely before the incidence of Covid-19, such as questioning and widespread alternatives to physical mobility (teleworking, virtual classes, online seminars, etc.). Naturally, this too has affected the actions proposed in the Plan.

Finally, to understand the context in which the Plan has been drawn up, it is necessary to take into account the plans and actions that are being promoted from the different administrative and institutional levels, to which the UdG has adhered and in which it has collaborated. First of all, the UdG's will has been to coordinate with the immediate surrounding area in order to work together and in the same direction.

On a Catalan level, on 17 January 2020, the Generalitat promoted the [1st Catalan Climate Action Summit](#). The UdG participated in the preparatory meetings and the Summit itself, and officially adhered to the commitments proposed. In fact, these commitments have influenced the drafting of the Greening Plan's objectives. Also on the Catalan level, the UdG has collaborated in the actions undertaken by the Climate Change Office such as the [Voluntary Agreements Programme](#) (PAV) or the [Catalan Climate Change Adaptation Strategy 2021-2030](#).

In the Girona region, the Environment Area of the Girona Provincial Council has been at the forefront of planning actions to adapt to and mitigate climate change, such as designing and implementing a 2005 emissions inventory for the entire Girona province within the framework of the [Sustainable Energy Action Plans \(SEAPs\)](#). The same body is currently recalculating its emissions inventory, and talks and collaborations have been set up to share information.

The city of Girona has been working since 2016 with the [Girona Climate and Sustainable Energy Action Plan \(PACES\)](#), which comes from the European Commission's Covenant of Mayors and whose main objective is to act municipally to reduce GHG emissions beyond what is set out in the European Union's 20/20/20 strategy; that is, to reduce it by at least 40% by 2030 compared to 2005. Also on a city level, in July 2021, the [Ecosocial Transition Plan](#) was launched in Girona to deal with the climate emergency, to which the UdG has adhered and with which it has been working since its inception.

Secondly, the UdG knows and shares the political and legislative initiatives promoted by governments on a national and international level in order to direct societies and their activities more firmly – rather than willing them – towards the established climate goals. On a European level, the [European Green Deal](#) was presented in 2019 as a package of measures promoted by the European Commission that aim to make Europe the world's first "climate-neutral" continent and promote "sustainable growth". These objectives and measures may have a legal framework following the adoption of the [European Climate Law](#) that is currently being processed. On a Spanish level, Act 7/2021 on [Climate Change and Energy Transition](#) was approved to help meet Spain's carbon neutrality commitments for 2050. And in Catalonia, [Act 16/2017 on Climate Change](#) was

also approved to provide a legal framework for the various actions in the direction of the climate change mitigation commitments acquired.

Third, networking has been a key tool for collaboration and the exchange of experiences related to university greening. In this university context, the UdG is part of different national and state networks. From the Network of Catalan Universities Zero Waste, the Sustainability Working Group of the Catalan Association of Public Universities (ACUP) was created, which meets monthly to address issues common to all Catalan universities, most of which set in motion greening processes between the late 1990s and the first decade of this century, and which are currently also in the process of revising their plans to deal with the climate emergency.

On a state level, the UdG has always been very active in the context of environmentally sensitive universities. Accordingly, it was part of the group that promoted the creation of the Sectoral Commission of the Conference of Rectors of Spanish Universities (CRUE) for Environmental Quality, Sustainable Development and Risk Prevention (currently CRUE-Sustainability), of which the UdG held the presidency and the technical office from 2007 to 2013. Currently, within this sector, it continues to actively participate in different working groups related to the Sustainable Development Goals (SDGs), such as equality, mobility, occupational hazards, healthy universities, curricular sustainability, and urban development and building. Participation in these working groups has led to involvement in projects in collaboration with other networks of European universities.

3. DESIGN AND PRINCIPLES OF THE PLAN

The Plan is conceived as a revision of the Strategic Greening Plan approved by agreement of the Government in the session 2/2000 of 14 February 2000 and rolled out by the management, research and teaching structures of the University since then. The new Greening Plan recognises and vindicates all the work in the form of policies, actions, infrastructure, agreements and so on carried out cumulatively since its inception.

Nevertheless, the new Greening Plan is based on a scientifically and socially different reality from the one that contextualised the original plan, a reality that means it is based on very different principles and needs that must become the foundations of the new plan. In that sense, therefore, the Greening Plan is in line with the recognition of the climate emergency approved by the UdG Senate.

The Plan has a global character embracing the whole University and a mainstreaming vocation to influence and share objectives with the diverse policies of the institution, not just those that, sectorally, are recognised as environmental policies.

In that regard, many of the UdG's policies have a great capacity to influence the institution's environmental policies, and the actions they carry out can optimise achievement of the actions in the Greening Plan. Examples include **campus policies** (construction and adaptation of buildings, reduction of emissions), **research policies** (professional mobility and modes of transport), **quality policies** (collection of information and inventory of emissions), **e-government** (digitisation and reduction of emissions), **telework policies** (regulation of remote work and reduction of emissions), **teaching policies** (future project and organisation of mobility), **internationalisation policies** (international students and virtual mobility) and the **UdG2030 Strategic Plan** (artificial intelligence and resource saving), among others.

The Plan therefore has a political and technical vocation. It should serve as a roadmap for the University's governing bodies to establish what objectives the UdG should have in environmental matters and what strategic actions are needed to achieve them. And it should also be used for the day-to-day management and roll-out of actions from a more operational point of view.

In order to achieve the proposed objectives and make implementation of the priority actions feasible requires an annual budget item of investments within the UdG budget.

3.1. PLAN GOVERNANCE

The Plan is conceived as a framework document for carrying out actions. Its level of specification takes the form of general objectives, operational objectives and actions. But beyond a statement of actions, however specific they may be, a process of prioritisation, selection, promotion, development and evaluation of the actions that remain outside the scope of the Plan will be necessary. Therefore, the bodies that must ensure the roll-out and monitoring of the Plan after its approval are proposed. The main bodies that will carry out these tasks are the Social Commitment Unit and the Technical Commission for the Review of the Greening Plan, although other UdG services such as the Technical and Maintenance Office will also play an important role.

Currently, the [Social Commitment Unit](#), specifically the [Sustainability Area](#), is assigned the functions of setting objectives and determining actions to improve the environment and promote sustainability in all areas of action and influence of the UdG. With regard to the development of the Greening Plan, the tasks will focus on the overall coordination of the plan and the management of the actions related to its functions. A report will be published annually on the actions taken and the estimated results in relation to the CO₂ emissions associated with UdG activity.

The Technical Commission for the Review of the Greening Plan's functions are to:

- **Assess and propose** to the appropriate bodies the **strategic objectives** of the UdG **in relation to climate change adaptation and mitigation.**
- **Monitor development and implementation of the new Greening Plan and the actions involved.**

On the one hand, its tasks will focus on the supporting and advising the Sustainability Area of the Social Commitment Unit. On the other hand, it will deal with the governing bodies, the Executive Council, the Governing Council and the University Senate, if necessary. The Commission's chairperson shall be accountable to the Governing Council for the Plan's progress and, where appropriate, channel the relevant requirements between the Governing Council and the Commission both ways.

3.2. PRINCIPLES OF THE PLAN

The guiding principles of the Greening Plan are those basic commitments and premises from which the objectives are drawn and the entire Plan is rolled out. These principles have been aligned with the SDGs of the [2030 Agenda for Sustainable Development](#), promoted by the United Nations. In this way, six principles have been agreed upon.

First, the **commitment to action against the climate crisis**. This corresponds to **SDG 13 (Climate Action)**. The fight against accelerating climate and environmental change is the main driving force behind the new Greening Plan and is seen as an emergency by the university community itself. The commitment includes both the desire to mitigate GHG emissions and the need for action to adapt to changes that are already underway and that will inevitably happen.

Second, the **commitment to other environmental issues** which, while not having a direct impact on GHG emissions, pose serious threats to the quality of life of the planet's species, including humans. This corresponds in particular to **SDGs 14 (Underwater Life) and 15 (Terrestrial Life)**. These are issues such as the pollution of plastics in the marine environment, the spread of invasive species, the loss of biodiversity, the overexploitation of resources and urban pollution.

Third, the **commitment to training, education and corporate leadership** of the UdG. The University has, in the first place, a training and educational mission that extends from the enrolled students and the university community itself to the people and organisations of the areas it is involved in. It plays an important and highly responsible role through the influence it exerts on the region's public authorities, companies and associations. This essential feature must be present and visible in the Greening Plan. This is in line with **SDG 4 (Quality Education)**.

Fourth, the **principle of proximity and responsibility in supply**. The production and consumption of local resources is important for reducing GHG emissions for various reasons, such as the reduction in transport used, the support infrastructure or the highly industrialised production centres. But it also has implications for other areas such as food, energy and resource sovereignty and security to reduce unnecessary long-distance flows. It focuses on local markets, diversifies supply and reduces energy and food waste. This is in line with **SDGs 7 (Clean and Affordable Energy) and 12 (Responsible Consumption and Production)**.

Fifth, **willingness to collaborate with institutions**. The UdG has limited size, budget and powers if ambitious goals are to be met in areas such as mobility, energy production, waste management, space management or training and education, like many other administrations, associations or companies. For that reason, it is necessary to establish a dialogue, collaboration and partnerships with other organisations to achieve certain goals. This is in line with **SDG 17 (Partnerships for the Goals)**.

Apart from these principles, the Plan recognises the other Sustainable Development Goals as its own and as a necessary complement to those mentioned above. In particular, the Plan also seeks to respond directly or indirectly to the following goals:

- **3. Health and well-being**, by promoting research in many fields such as ecosystem services, a healthy university, water sanitation, air and noise pollution, etc.
- **6. Clean water and sanitation**, by conceiving campuses as places for implementing projects that manage the entire water cycle.
- **8. Decent work and economic growth**, through experiences such as the UdG Ecosolidarity Garden, which creates conditions for vulnerable groups to have access to quality jobs.
- **9. Industry, innovation and infrastructure**, by collaborating with training and research for innovation and inclusive and sustainable industrial development actions.
- **11. Sustainable cities and communities**, by collaborating with administrations and citizens to facilitate a healthy and socially and environmentally responsible city.

3.3. UdG CLIMATE COMMITMENTS

In line with the principles established by the Greening Plan and the Senate Agreement for the Climate Emergency, following the 1st Catalan Climate Action Summit (held on 17 January 2020), the UdG formally adopted the following commitments, which demonstrate its involvement and are part of the principles on which the Greening Plan is based:

- To adhere to the goal of Catalonia achieving carbon neutrality by 2050.
- To deepen knowledge of the climatic impact of its activity.
- To disseminate and encourage climate commitment in its organisation.
- To reduce the climate impact of mobility.
- To gradually adopt the principles of the circular economy.
- As a higher education and research institution:
 - To turn its campuses into an environment that plays an active role in climate sustainability as regards both the design and maintenance of spaces with sustainable criteria and the idea of a pedagogical campus (campus lab).
 - To include sustainability in university curricula (bachelor's, master's and doctoral degrees) as well as in the training teaching and research staff (PDI) administrative and service staff (PAS).
 - To encourage research in sustainability, in order to contribute to the knowledge of its scientific community and thus develop the best solutions to the climate emergency.

4. PLAN PREPARATION METHOD

The Greening Plan has been designed, discussed and developed within the framework of the Technical Commission for its review. The Commission, meeting in different sessions from January 2020, designed the general structure and method for advancing the drafting of the Plan. It decided to draw up a co-creative plan, open to the knowledge and participation of experts and the university community. Diverse methods of participation and knowledge generation have been developed:

- **Discussion of the constituent elements of the Plan**, such as the principles, objectives and actions of the Technical Commission for the Review of the Greening Plan itself. The Commission alone is a diverse and representative discussion forum of the university community, comprised of representatives of the students, the administrative and service staff and the teaching and research staff, the Institute of the Environment, the Social Commitment Unit, the University Executive Council and the Technical and Maintenance Office Service.
- **Organisation of round tables to address the Plan's key issues in depth**, involving experts from each field and a rapporteur tasked with presenting the theme, guiding the discussion and writing a final report. The round tables organised were:
 1. **Curricular sustainability** (9 October 2020). Rapporteur: Leslie Mahe Collazo.
 2. **Resource optimisation** (10 November 2020). Rapporteur: Carol Coll.
 3. **Waste management** (14 December 2020). Rapporteur: Jordi Ribas.
 4. **Mobility** (22 January 2021). Rapporteur: Pep Juandó.
 5. **Space management** (2 February 2021). Rapporteur: Sergi Nuss.

Within this theme, although not in the same format, a specific meeting was organised on 2 March 2020 with the heads of the Girona Provincial Council Environment Department to address the issue of the emissions inventory.

- **Presentation and dissemination of the Plan to various University collectives.** At different stages of the drafting process, the logic, structure and objectives of the Plan were presented to three groups with a different composition – on 8 April 2021, to a group formed by heads of unit and administration of centre of the University, in the framework of the training days of organised by the Deputy General Manager’s Office; on 16 April 2021, to the UdG for the Climate group, made up of members of the PAS, the PDI and the student body; and on 27 May 2021, to the Governing Council of the University, in an informative presentation – where these three questions were discussed.
- **Public display among the university community.** In the final phase, once the final draft was ready, the Greening Plan was presented in full to the university community, who were invited to read it and participate in the form of amendments, contributions and comments. The public display period was from 16 to 30 September 2021.

The participants in this process were joined by a large number of members of the university community and other organisations listed below whose cooperation was appreciated.

- **Members of the Technical Commission for the Review of the Greening Plan:** Jaume Feliu (chair), Pep Juandó (secretary), Carolina Martí (IMA), Sílvia Lloveras (UCS), Joan Roca (SOTIM), Biel Cardona (EST), Pau Planas (PAS), Pere Roura Grabulosa (PDI).
- **Guests at the thematic round tables:** Gabriel Barbeta (PDI), Enric Berenguer (PAS), David Brusi (PDI), Anna Camp (Girona Provincial Council), Gerard Casacuberta (EST), Carol Coll (rapporteur), Jesús Granados (PDI), Pep Juandó (rapporteur), Leslie Mahe Collazo (rapporteur), Sergi Nuss (speaker), Marc Marí (Girona Provincial Council), Xavier Molins (PAS), Lino Montoro (PDI), Jordi Ribas (rapporteur), Ignasi Rodríguez-Roda (PDI).
- **Members at the UdG for Climate presentation:** Narcís Gascons (PDI), Gabriel Jover (PDI), Florencio de la Torre (PDI), Maria Mercè Pareta (PDI), Montserrat Seralols (PAS).
- All the community members who submitted amendments and comments during the public exhibition period.

5. CURRENT STATUS

The initial diagnosis is summarised in a text for each strategic line, which describes the current status and most important issues, and also details the provisional 2019 emissions inventory.

5.1. MOBILITY

At the UdG, mobility accounts for around 90% of the emissions derived from its activity. The biggest amount in this figure is the everyday mobility to reach the campuses, in particular trips outside the city which, according to the annual mobility surveys, account for more than 50% of total compulsory mobility.

The lack of an efficient public transport system that covers the whole of Girona favours individual travel by car. And the difficulty students have in finding affordable housing in the city increases the need for mobility.

Mobility management in recent years has helped reduce car use if not shared and increased alternative travel modes such as walking, bus transport and cycling.

Despite efforts to promote the use of bicycles (loan service, [eBicis](#), bike routes and bike lanes, etc.), walking, public transport (TMG season ticket, RENFE agreement, mobility on demand website, etc.) and car-sharing via the [Fes edit](#) platform (which has around 900 users), a point has been reached where it is difficult to reduce the most emitting modes of travel, so other aspects need to be addressed, such as organisational issues.

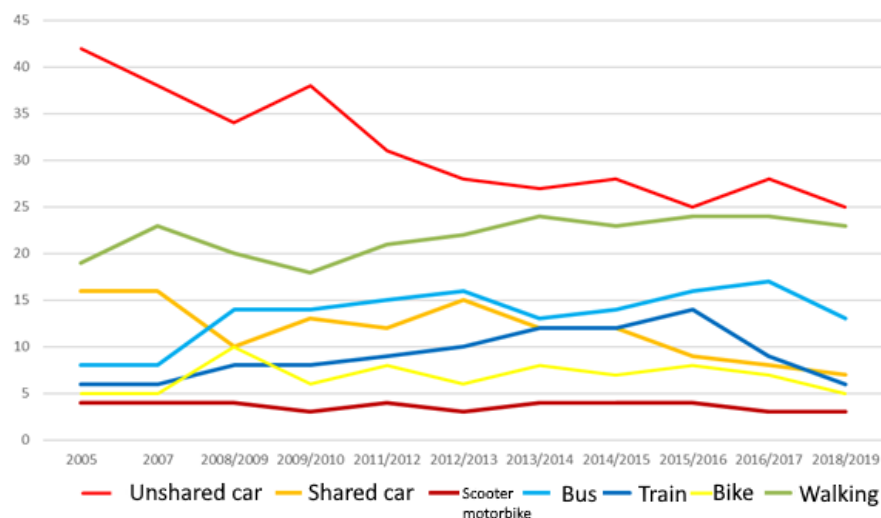


Figure 2. Evolution in the use of means of transport among the UdG community, 2005-2019

In terms of non-daily, professional and study mobility, the University shows a high volume of national and international travel. With regard to professional mobility, the UdG has not carried out any mitigation policy.

5.2. SPACE MANAGEMENT AND ADAPTATION

The layout of the Montilivi campus (CM) and its location in the peri-urban area have meant that most space management and adaptation actions have been concentrated both in terms of infrastructure and biodiversity projects. On the city campuses, it has proved more difficult to generate spaces of interest and/or for relating in and this has been limited to actions in the same buildings.

Since the approval of the Greening Plan, it has been possible to carry out pioneering and lasting actions related to space treatment and maintenance, with sustainability criteria such as the introduction of ecological gardening. One of the aims has been to increase the amount of permeable soil in order to facilitate infiltration of run-off water, which has led to some parking and paved areas being turned into spaces linked to soil drainage.

Campus surface area (m ²)	MONTILIVI	BARRI VELL	CENTRE
Total	168,452	21,630*	5,922
Construction	28,308	9,410	2,174
Buildings	70,440	29,252	7,501
Woodland	37,750	-	-
Vegetation	24,848	3,209	-
Permeable soil	81,626	8,357	-
% soil permeability	48.5	39	-

* Does not include the assigned car park outside the walls, as it is not for the exclusive use of the UdG (9,000 m² of permeable soil)

Table 1. *Distribution of uses by campus*

Another of the CM's objectives has been to **pacify the campus**, which has been done by reducing access to all motor vehicles. In the future, this milestone will lead to urban development and humanisation projects for many spaces, some of which are currently at the idea stage while others are already at the preliminary design stage.

The **projects and spaces developed** in recent years **have followed a pattern** that responds to pieces measuring 4.5 m × 4.5 m (in proportion to the size of the CM plots) **with a diversity of features and uses**, which will enable all campus actions to be organised.

In the tradition of **teaching campuses**, the **natural heritage** of the CM has been highlighted through the design of **environmental itineraries** (flora, geology, etc.). In the same vein, there is potential on the Barri Vell campus to bring out the old quarter's **cultural and architectural heritage** and its link with the nearest natural environment, **healthy itineraries** being a good example.

The **Hort Ecosolidari** vegetable garden project has been and is very well received by the whole community, as well as other groups and entities, which should guarantee its continuity.

5.3. WASTE MANAGEMENT

The UdG generates a wide variety of waste, ranging from urban and similar waste to toxic and hazardous waste, each with their own circuit for collection, transport and treatment by authorised managers.

Waste management at the UdG has paralleled that of the different public authorities, which initially attached a lot of importance to selective collection for the subsequent recycling circuit. Over time, the hierarchy has moved toward prevention (avoiding generation), followed by reuse and preparation for reuse, recycling, and finally recovery.

Biennial studies on the quantification of municipal waste generated at the UdG indicate that there has been an increase in per capita generation since 2015.

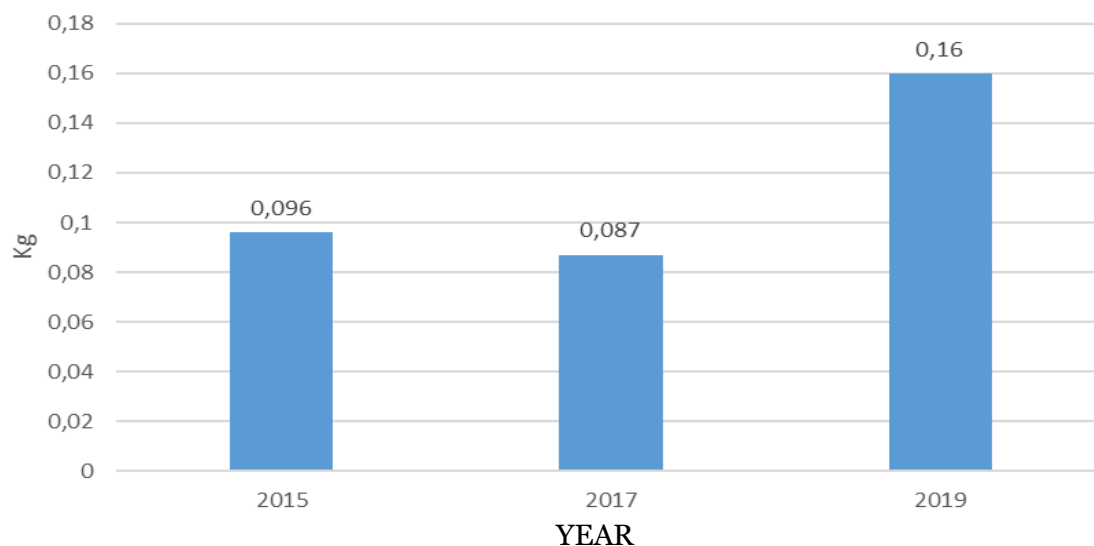


Figure 3. Daily generation of waste per capita

Although the technical specifications for the cafeteria service concessions explicitly refer to the need to avoid single-use items, there has been an increase in this type of waste which has been more marked since the application of health measures.

With regard to the quality of selective collection, the characterisations that have been carried out in parallel with the quantification studies indicate that in the centres or spaces where individual litter bins are removed, the quality of the collection improves significantly. To give an example, in the common room at the Montilivi campus, where litter bins have been removed, quality collection is 75%, almost 20 points above the UdG average. At the other end of the spectrum there is a centre where improper collection stands at 80%, in other words, quality collection only accounts for 20%.

Although the regulations on managing waste electrical and electronic equipment (WEEE) encourage the recycling of obsolete appliances when they are replaced, the UdG still collects more than 10 tonnes a year.

The collection of paper and cardboard, which is managed by the UdG itself through special work centres, was stable at around 20 tonnes a year until 2019. With the final implementation of e-administration, a significant reduction in this type of waste is expected.

5.4. RESOURCE OPTIMISATION

Energy consumption gradually decreased until 2015 but since then it has stagnated or increased depending on the buildings. In 2020, this trend was broken by a downturn due to the health emergency. Although the purchase of electricity is 100% renewable with a guarantee of origin, we must not fall into the trap of not continuing to promote energy saving and efficiency, even more so if we want to move towards long-term energy self-sufficiency.

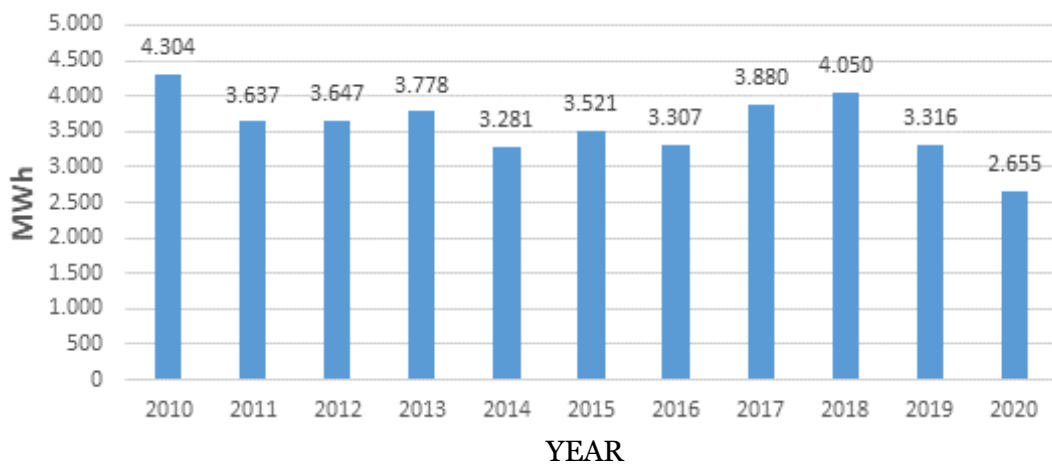


Figure 4. Gas consumption (MWh / year)

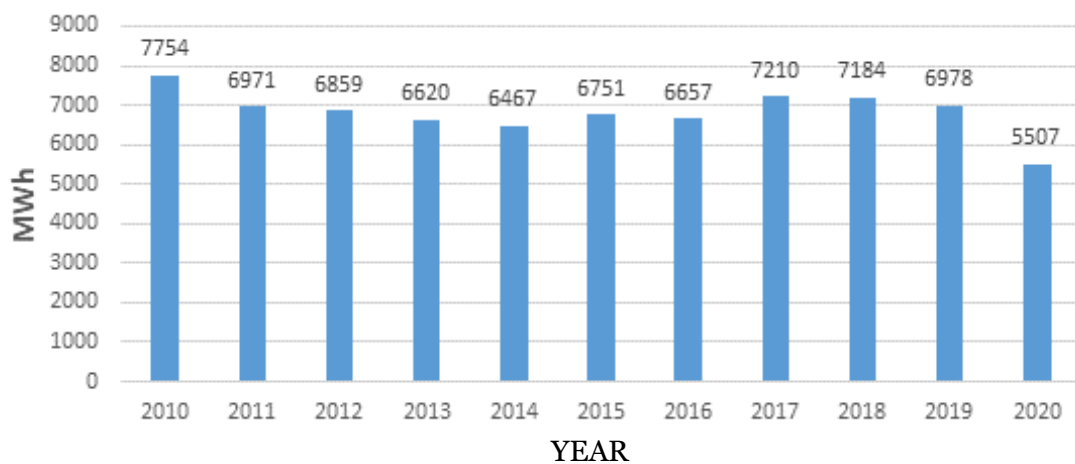


Figure 5. Electricity consumption (MWh / year)

The production of renewable energy (RE) on campus has a pedagogical and research function, rather than a productive one. It is a field in which we are obliged to move forward in order to meet the reduction targets we have committed ourselves to, especially considering that the current generation is below 0.5% of all energy consumption:

- **Photovoltaic facilities** (Universol + P4): 14,000 kWh/year
- **Geothermal** (Workshops): 200 kWh/year
- **Wind** (P2): 600 kWh/year
- **Solar thermal:** the installation of the Sports Service changing rooms means a 60% reduction compared to a conventional boiler.

Water consumption is fairly stable, but savings must continue to be made, while also exploring other forms of catchment beyond the public network, on-campus wastewater treatment, and regeneration systems for reuse in non-oral uses.

The greening of purchasing and procurement must continue to be reviewed and innovated in order to continue moving towards more sustainable models that are socially just and in line with the circular economy (blue economy, green economy, the common good, etc.). To date, environmental specifications have been included in the cafeteria and vending service (also healthy criteria), the maintenance of spaces and gardening, IT, purchase of consumables, folder designs, the cleaning service, copy shop, and so on. Further progress must be made in line with regulations, as these will become increasingly demanding with regard to reducing emissions from catering concession companies.

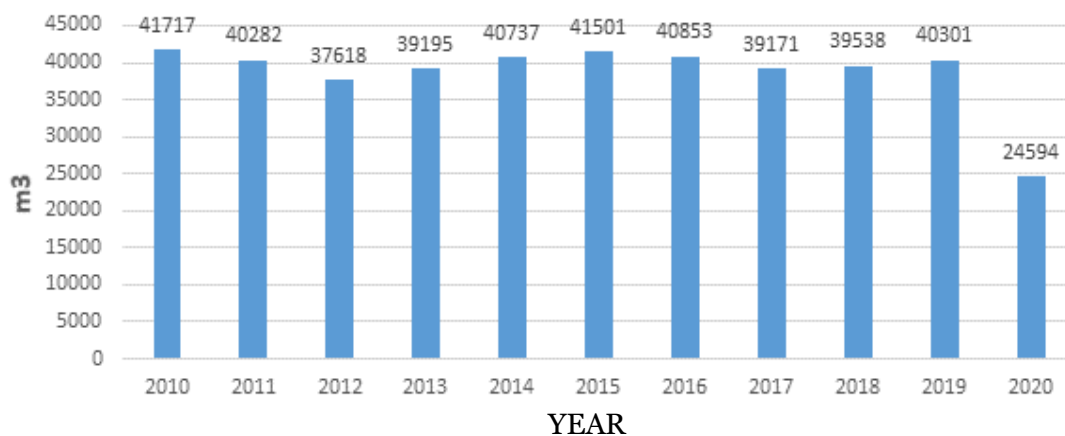


Figure 6. Water consumption (m³ / year)

The link with the Voluntary Agreements Programme of the Catalan Climate Change Office (OCCC), of which the UdG has been a member since 2011, must be continued, because it has now established itself as the Catalan benchmark for leading compliance with the CO₂ reduction targets by 45% by 2030.

5.5. CURRICULAR GREENING

The opportunity afforded by adapting to the European Higher Education Area (EHEA) to incorporate sustainability as one of the cross-cutting competencies has not yielded the expected results. Given it is seen as a useful and an important tool, it is necessary to rethink this action as another way of introducing sustainability and its evaluation into all levels.

Currently, aside from some subjects that already incorporate sustainability in the curriculum of some degrees, most of which are optional, some modules, subjects or courses aimed at introducing this dimension are taught outside the curriculum, for example the Introduction to Sustainability course, Introduction to the UdG course, PAS and ICE training courses, the Interuniversity Global Challenge, and so on.

The campuses themselves become potential laboratories for contextualising final bachelor's and master's degree theses (TFG and TFM) and for developing business practices at the service of the Greening Plan.

5.6. INFORMATION AND AWARENESS

Since 2017, environmental information and awareness related to university greening has been developed by following the communication strategies of the Social Commitment Unit. Priority has been given at all times to the most innovative ways and trends for reaching as many members of the community as possible, most recently through chatbots, which transmit information 24 hours a day, 365 days a year.

These channels have been used to disseminate environmental awareness actions and projects, both those generated within the university itself and those of other national and international entities or institutions (UdG Sustainability Week, Earth Day, Energy Week, European Mobility Week and World Water Day, among others) the UdG supports.

Occasionally, the Unit has designed its own very specific campaigns to focus on issues related to energy efficiency and savings (Bye bye standby, a guide to sustainable teleworking, energy and water saving tips at home and at work, etc.), campaigns for waste prevention (actions within the framework of the Catalan strategy for waste prevention, greening festivities, the Doble Cara campaign, etc.) or the UdGCO₂mpensa as a tool for compensating individual and/or institutional emissions.

5.7. PROVISIONAL CO₂ EMISSIONS INVENTORY (2019)

A necessary source of information for the diagnosis of the Plan is the accounting of the GHG emissions that are emitted as a result of the activities carried out by the UdG.

The indicator used to measure the UdG's environmental impact is its carbon footprint, which allows us to quantify the total GHG emissions generated by the UdG's activity. The unit is the tonnes of CO₂ equivalent per year (tCO₂eq/year), as the emissions of all GHGs – which, according to Annex I of the Kyoto Protocol, are carbon dioxide (CO₂), methane (CH₄), nitrogen oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆) – are calculated in a single piece of information.

After joining the Programme of Voluntary Agreements for the Reduction of CO₂ Emissions, promoted by the Catalan Government through the OCCC, during the period 2010-2019 the UdG carried out simplified annual emission inventories in relation to the following scopes:

- **Scope 1 (direct emissions).** These are GHGs emitted directly by the UdG through the use of fossil fuels in vehicles of its own fleet and in gas-fired heating boilers, or due to losses of refrigerant gases (fluorinated gases included in the inventory since 2017).
- **Scope 2 (indirect energy emissions).** These are the GHGs emitted by the producer of the electricity consumed by the UdG. This data is variable, as it depends on the energy combination of the grid that supplies the UdG. Since 2018, the Catalan Climate Change Office considers that the emissions associated with green electricity with a guarantee of origin are zero.
- **Scope 3 (other indirect emissions).** These are attributable to the products and services purchased, which in turn will have previously generated emissions in order to be produced. To that end, and since the 2016 inventory, the UdG has been reporting emissions from water consumption.

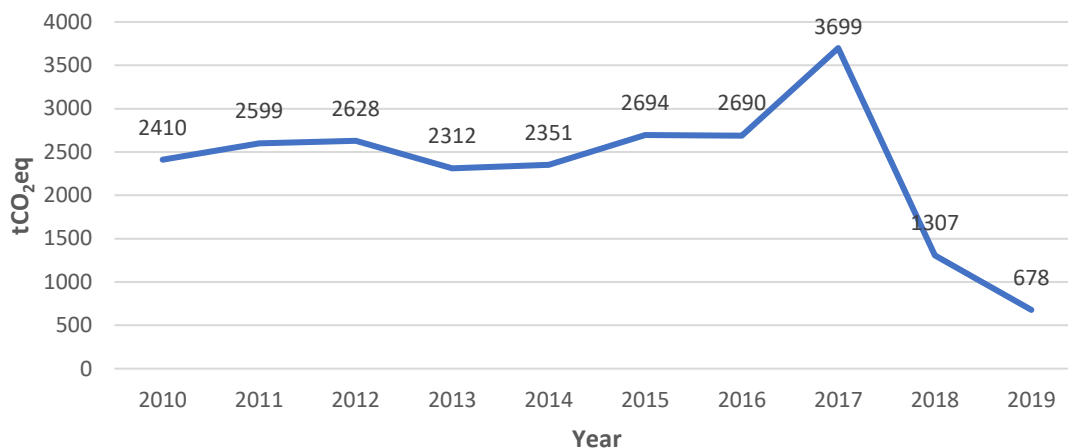


Figure 7. Evolution of emissions according to the Voluntary Agreements Programme. The decline from 2018 is due to the purchase of green electricity.

The Voluntary Agreement Programme is based on ISO 14064 (Part 1). This is a standard that specifies the principles and requirements for the quantification and reporting of GHG emissions to member organisations. The 2021 version of the GHG Calculator and the Guide to Calculating Greenhouse Gas Emissions is in line with the new version of ISO 14064 (Part 1), which was published in December 2018. This version incorporates significant changes compared to the previous version and, therefore, in the model followed by the inventories for the period 2010-2019. The most important change in the standard is that emissions are no longer divided into three broad categories (scope 1, 2 and 3), but into two: direct and indirect emissions.

1. **Direct emissions.** Reporting direct emissions remains mandatory. This includes **emissions directly generated by the organisation's facilities and/or vehicles** (such as emissions from fossil fuel consumption in fixed or mobile installations, emissions from fluorinated gas leaks and process emissions).
2. **Indirect emissions.** There are substantial changes in indirect emissions, because in the previous version of the standard it was only mandatory to calculate and report indirect energy emissions (former scope 2), which include **emissions from the consumption of electricity and the consumption of heat, steam and cold acquired by the organisation.** In the case of other indirect emissions (former scope 3), such as those due to waste treatment, non-own fleet transport, etc., their calculation and communication was optional. With the update of the standard, all indirect emissions are in the same package and it is mandatory to report those that are significant to the organisation's inventory.

In order to determine the reduction targets set by the UdG within the framework of the Catalan Climate Change Summit, the reference year is set for 2011, the year in which the UdG's emissions were counted for the first time. To determine current emissions 2019, for which the following diagnostic data are available, has been used as an example:

VECTOR	EMISSIONS tCO ₂ eq/year		SOURCE Year 2019		
Energy	589.77				
	Gas	589.6			PAV
	Electricity	0.17			PAV
Fluorinated gases	51.7	51.7			PAV
Mobility	13,906.35				
	UdG fleet	20.35			PAV
	Campus access	10,800			Mobility survey
		PAS+PDI	1,800		
			Non Girona	1,720	
			Girona	80	
		Students	9,000		
			Non Girona	8,750	
			Girona	250	
	Professional	386			1,509 flights
					2020 data: 403 flights 111 t _m CO ₂ (72% reduction)
		PDI+PAS	386		
		Doctoral degree students	0		?
	Students	2,700			
		Erasmus	1,890		Estimation
		Master's and doctoral degrees	0		?
Water	15.92	15.92			2019
Materials	180.43				
	Plastic bottles	25			Estimation
	Paper	62.3			Own + reprographics
	Toners	6.23			Estimation
	Waste	30.6			Quantification study
	Computers	45			Estimation

Table 2. Provisional emissions inventory (tCO₂eq/year)

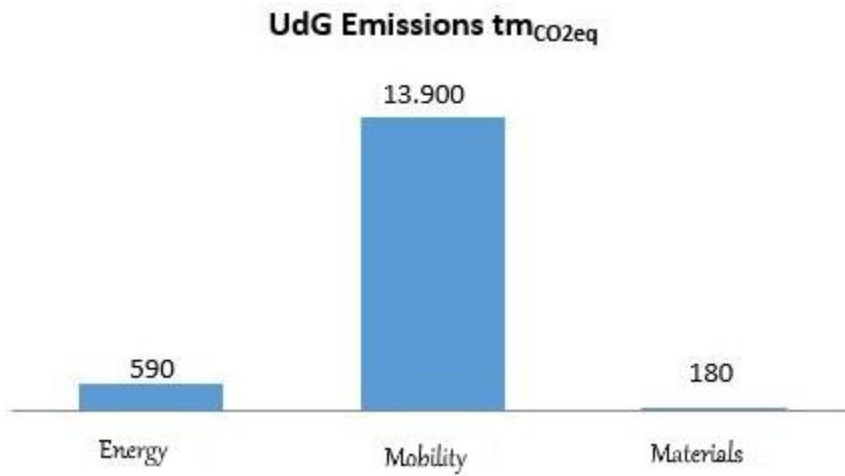


Figure 8. Total UdG emissions (tCO₂eq/year)

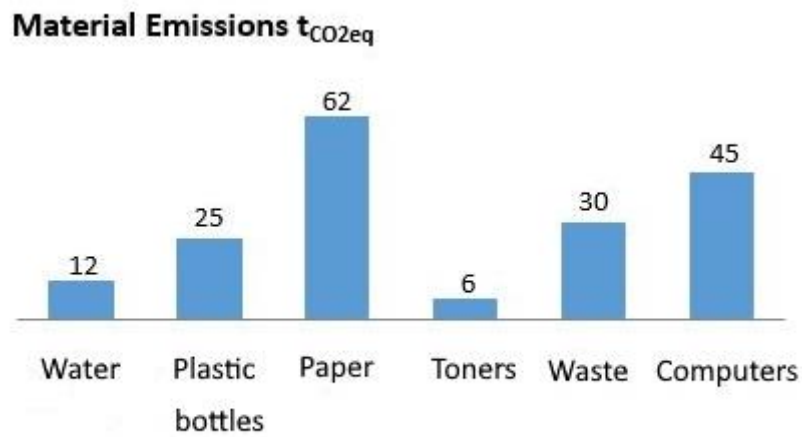


Figure 9. UdG material emissions (tCO₂eq/year)

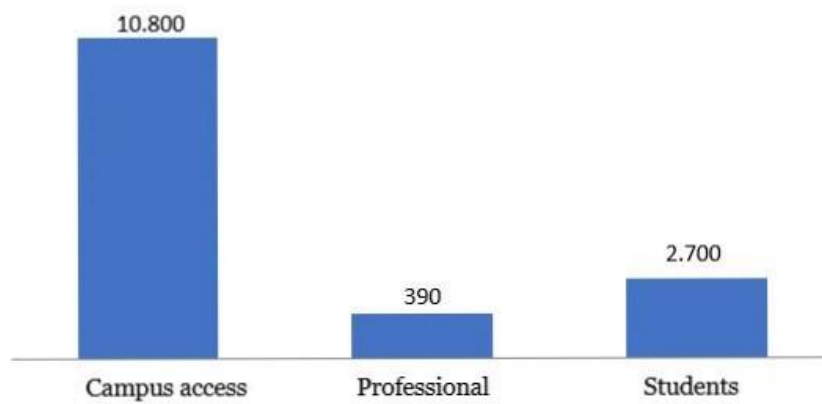


Figure 10. Mobility emissions at the UdG (tCO₂eq/year)

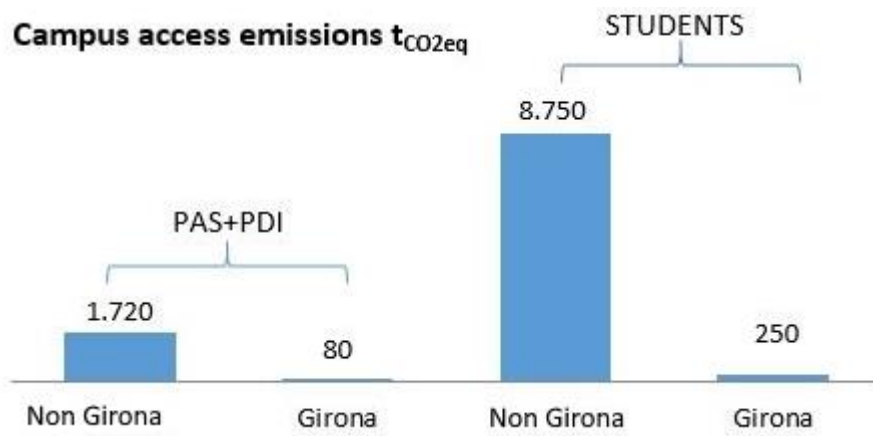


Figure 11. Campus access emissions (tCO₂eq/year)

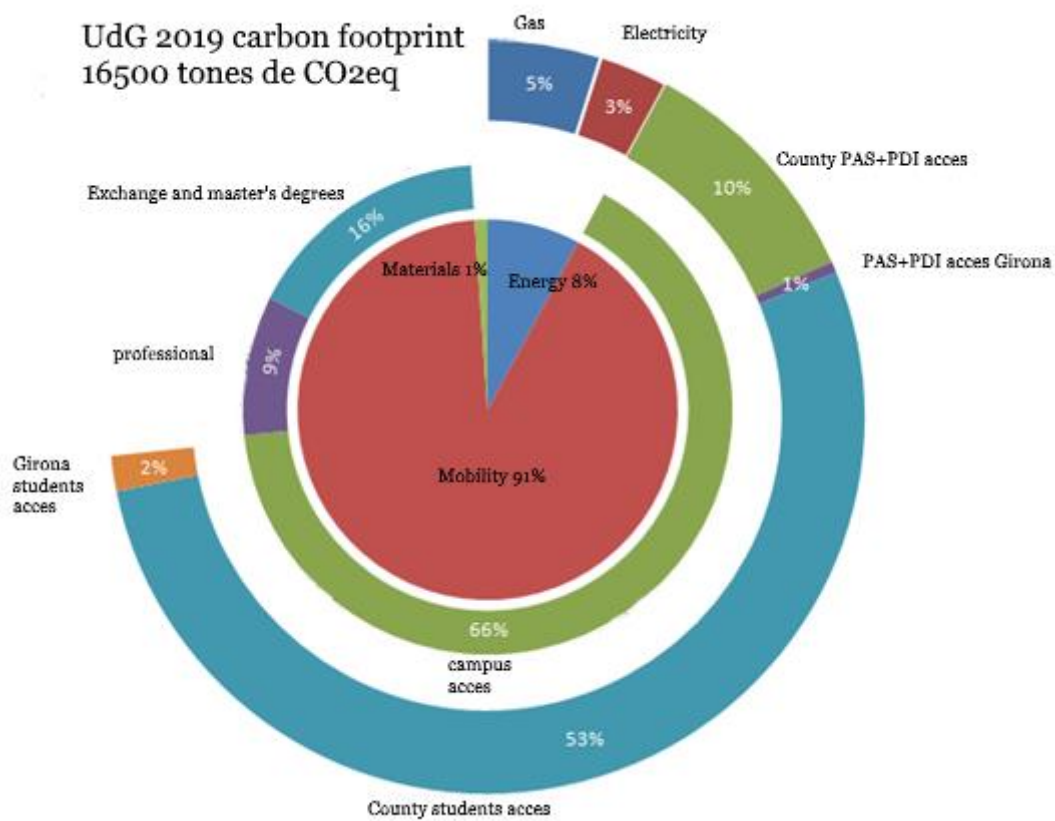


Figure 12. Provisional CO₂ emissions inventory for 2019

6. GOALS, OBJECTIVES AND ACTIONS

Based on the current situation especially the result of the 2019 emissions inventory, and in accordance with the principles of the Plan described in section 3.2, the central goal of the Greening Plan is established as follows: **to resolutely guide the UdG's space and activity policies so that they are consistent with the emergency of reducing carbon emissions by 50% by 2030 and so that they take advantage of the opportunity for the university environment to generate community-wide awareness and knowledge of the issue.**

The reference year for accounting for emissions reductions will be 2011. This was the first year that data from UdG emissions were collected thanks to membership in the Voluntary Agreements Programme of the Catalan Climate Change Office. Furthermore, there are other data available from 2019 that will enable a reliable estimate of total emissions to be achieved.

The central objective gives rise to **three areas** and these areas give rise to eight **lines of action**, each with targets, which are the basis for the roll-out, finally, of the **operational objectives and actions**.

The areas and lines of the Plan are:

- **Area 1. CLIMATE EMERGENCY.** Goal: to measure in detail the emissions generated by the UdG and reduce them progressively to achieve a 50% reduction by 2030, compared to 2011, as well as carbon neutrality by 2050.
 - **Line 1. MOBILITY.** Objective: to reduce the carbon footprint of access to the campus, travel for professional reasons, management and studies of the UdG in accordance with an annual carbon budget that includes a reduction of 50% by 2030.
 - **Line 2. ENERGY.** Objective: to reduce the energy consumption of buildings and the carbon footprint related to this consumption in accordance with an annual carbon budget that includes a 50%

- reduction by 2030, and encourage the production of energy with renewable sources on campus.
- **Line 3. EMISSIONS INVENTORY.** Objective: to provide the UdG with the appropriate procedures to accurately and quickly quantify its carbon footprint, which will be detailed in the emissions inventory and will serve as a basis for establishing the annual carbon budget.
 - **Line 4. CARBON BUDGET.** Objective: to establish a global monitoring and guidance tool for the UdG's policies in relation to the emission reduction target.
- **Area 2. CAMPUS LIFE.** Goal: to promote the campus as an active, didactic and experimental setting for the natural integration of the environment, the adaptation of buildings, the optimisation of resources and their cycle, and climate sustainability in general (campus lab).
 - **Line 5. WASTE CONSUMPTION AND MANAGEMENT.** Objective: to promote responsible consumption, to establish strategies for optimising resources and waste prevention at source in order to move towards the closure of material cycles, minimise the use of resources and streamline the flow of matter and energy throughout the activity carried out at the UdG.
 - **Line 6. SPACE MANAGEMENT.** Objective: to make the various uses and functions of the campuses – whether they are built spaces or those for leisure and people to relate – compatible with preserving the natural and cultural heritage, teaching and research, in order to promote campuses as educational spaces and spaces for sustainability experimentation (campus lab), as well as increasing the surface area of permeable soil surface, the rehabilitation of buildings and the adaptation of spaces to climate change.
 - **Area 3. TRAINING AND AWARENESS.** Goal: to involve the university community in environmental issues in order to promote a change of values, habits and attitudes, and to encourage the focus of studies and research on action for sustainability.
 - **Line 7. TRAINING FOR SUSTAINABILITY.** Objective: to train students in a comprehensive way to respond to the socio-environmental challenges of today's society. This requires a sustainable approach to teaching and research, as well as social leadership and governance, in order to make progress on preserving the natural environment and promoting the circular economy and social justice.
 - **Line 8. ENVIRONMENTAL COMMUNICATION.** Objective: to establish communication mechanisms aimed at raising awareness of

environmental issues, promoting environmental education in terms of changing values, habits and attitudes of respect for the environment and, consequently, to act/participate individually and collectively in solving present and future environmental challenges.

6.1. CLIMATE EMERGENCY

6.1.1. MOBILITY

Consolidated projects	<ul style="list-style-type: none"> • UdG bicycle loan service • Electric bicycle loan service (eBicis) PAS and PDI • Urban bus pass "Come to the UdG by bus" • RENFE Rodalies Catalunya UdG monthly pass • "A la carte mobility" website • Carpooling platform Fes edit
General objective	<ul style="list-style-type: none"> • Reduce the carbon footprint of access to campuses, travel for professional reasons, management and studies at the UdG in accordance with an annual carbon budget that includes a 50% reduction by 2030.
General considerations	<ol style="list-style-type: none"> 1. The 2019 Provisional Emission Inventory shows that mobility is responsible for more than 90% of CO₂ emissions. 2. The carbon footprint associated with access to campuses is by far the largest (over 70% of all mobility). 3. The contribution of students, PAS and PDI who travel from the city of Girona is relatively small (<10%). 4. The improvement in the means of transportation used to access the campus, reflected in the annual mobility survey, has stalled since 2016 despite all institutional efforts to prevent unshared private vehicle transportation. 5. A significant additional reduction in the carbon footprint of campus access must necessarily involve decisions that go beyond the uses of mobility means. 6. While the above estimates are significant, we lack an accurate tool for measuring the carbon footprint of campus access. 7. Apart from access to the campuses, UdG activity generates many trips that until today have not been evaluated: the professional and management mobility of staff (PAS and PDI), that of the student exchanges and that of the foreign students of masters and doctorates. Much of this travel generates a significant carbon footprint because the distances are very long.
Operational objectives	<ol style="list-style-type: none"> 1. Streamline activity to reduce the daily mobility of campus access along the lines of non-mobility. 2. Facilitate the stay of students in the urban area of Girona during the course. 3. Encourage alternative mobility to the individual use of the combustion-engine car. 4. Optimise and reduce compulsory mobility for professional, management and study reasons.
Operational objective 1. Streamline activity to reduce the daily mobility	<ol style="list-style-type: none"> 1. Define an ambitious teleworking policy that takes into account the real need for people to be present at their workplace.

<p>of campus access along the lines of non-mobility</p>	<ol style="list-style-type: none"> 2. Define the concept of blended teaching at the UdG to allow teaching methodologies that promote the complementarity of face-to-face and non-face-to-face teaching. 3. Concentrate on academic and administrative activity in order to reduce weekly travel.
<p>Operational objective 2. Facilitate the stay of students in the urban area of Girona during the course</p>	<ol style="list-style-type: none"> 1. Within a maximum period of two years, carry out a study that explores the different accommodation options for UdG students in the urban area of Girona. 2. Increase the supply of university accommodation for students. 3. Agree with the municipalities in the Girona urban area, with the participation of non-profit organisations, upon a housing policy for students that ensures a supply of quality, non-speculative housing for everyone. 4. Establish a collaboration and coordination agreement between the UdG and the social services of the different municipalities to access different types of accommodation, such as the "Viure i conviure" programme.
<p>Operational objective 3. Encourage alternative mobility to the individual use of the combustion-engine car</p>	<ol style="list-style-type: none"> 1. Consolidate and rethink, where appropriate, projects to promote daily mobility by collective means and the habits of walking and cycling. 2. Consolidate and grow projects that promote car sharing within the UdG community or with other nearby communities. 3. Jointly promote shared electric car projects with the local authorities of the Girona area. 4. Join forces with the other authorities in order to improve and expand the service that public transport offers the UdG in terms of routes, timetables and quality. 5. Gradually reduce (at the same rate of reduction as that set by the carbon footprint) the area for parking internal-combustion cars in favour of electric cars and a better life on campus.
<p>Operational objective 4. Optimise and reduce compulsory mobility for professional, management and study reasons</p>	<ol style="list-style-type: none"> 1. Design a decision tree to provide alternatives to GHG-emitting business travel based on a number of criteria such as non-mobility, distance, travel time, more sustainable mobility options, and so on. 2. Design a programme to adjust the travel of UdG staff to the University's annual carbon budget. 3. Incorporate, among the criteria for student exchanges, an increase in the exchange period and minimisation of the carbon footprint related to the travel they generate, also with the use of virtual exchange tools such as COIL or Euroweek. 4. Encourage and facilitate meetings and non-face-to-face events (congresses, seminars and mass meetings, among others) in line with the offer of properly equipped spaces.

6.1.2. ENERGY

Consolidated projects	<ul style="list-style-type: none"> • Adherence to the OCCC Voluntary Agreement Programme • Environmental specifications and consortium purchase of green electricity • Renewable energy research facilities (Universol, geothermal, wind and solar thermal)
General objective	<ul style="list-style-type: none"> • Reduce energy consumption in buildings and the carbon footprint associated with this consumption, in accordance with an annual carbon budget that envisages a 50% reduction by 2030, and encourage energy production with renewable sources on campus.
General considerations	<ol style="list-style-type: none"> 1. Energy consumption in buildings is the second most important contribution to the UdG's carbon footprint. 2. Despite active monitoring of energy consumption by the centres and SOTIM, since 2016 this consumption has stopped decreasing or has increased. 3. The bill for energy consumption is considerable (in 2019, 6,977,962 kWh or €950,000/year in electricity and 3,316,389 kWh or €200,000/year in gas for the UdG buildings, without considering those of the S&T Park). A saving of 50% would free up resources for technical improvements aimed at the energy efficiency of buildings and self-generating electricity facilities. 4. Although most of the kWh of electricity consumed is certified as "green electricity", a rigorous analysis makes it clear that this option does not allow its carbon footprint to be considered as zero, even though the OCCC considers it to be zero. 5. Air conditioning accounts for about 50% of the total energy consumption of buildings. 6. Many of the UdG buildings still have a natural gas combustion heating system, which has a considerable carbon footprint. 7. There is a very wide range in the degree of technification and energy efficiency in the UdG buildings as a whole, so the technical options for reducing consumption and the level of investment required vary greatly from one building to another. 8. The investment in improving efficiency is considerable, making it impossible to achieve the desired reduction in energy consumption without rethinking consumption patterns. 9. The activity varies greatly from one centre to another, so it is the users themselves who can find the best options for reducing consumption. 10. In buildings with experimental research activity or computer server systems, the electricity consumption for these uses is very considerable and is higher than the other uses combined. 11. The UdG campuses have many roofs covering buildings and surfaces (such as car parks) that are suitable for installing photovoltaic energy collectors that could reduce the purchase of

	<p>energy. In order to meet building energy consumption (electricity and gas), about 50% of the total campus area would have to be covered with photovoltaic panels. The roofs of the buildings (supposedly all well oriented and without shadows) would only cover about 60% of the demand.</p> <p>12. The potential of medium-sized wind turbines as energy producers must also be considered.</p>
<p>Operational objectives</p>	<ol style="list-style-type: none"> 1. Reduce energy consumption in buildings and on campuses. 2. Encourage the production of renewable energy and increase self-consumption. 3. Replace fossil fuels with thermal energy needs. 4. Improve the energy efficiency of buildings. 5. Encourage formulas for citizen empowerment such as energy communities.
<p>Operational objective 1. Reduce energy consumption in buildings and campuses</p>	<ol style="list-style-type: none"> 1. Reduce energy consumption in buildings by 40% by 2030. This decrease could be partially replaced by an equivalent generation of energy on campus. 2. Choose the person in charge of greening and create the Greening Committee for each centre or building within the framework of the Autonomy Plan for the Maintenance of University Buildings and Environments (PAMEEU) to optimise energy consumption and propose technical improvements. 3. Define the concept of blended teaching at the UdG to allow teaching methodologies that promote the complementarity of face-to-face and non-face-to-face teaching (action shared with Mobility). 4. Concentrate academic activity so that the use of each teaching space (classrooms and laboratories) is as continuous as possible. 5. Schedule centre opening hours so that occupancy is high. When the expected occupancy is low, move the activity to another centre on the same campus. 6. Avoid air-conditioning in unoccupied or pass-through spaces. Where automatic control is not possible, enable manual control. 7. Avoid lighting the classrooms outside of teaching hours and optimise the use of natural light. 8. Develop a good practice manual for buildings. 9. Optimise electricity consumption in laboratories and research facilities. 10. Carry out studies to find out the real energy demand of buildings (kWh/m²) that include aspects related to light and thermal comfort (according to current regulations). 11. Along with the emissions inventory, submit an annual report to the Governing Council with comparative data on energy consumption in the UdG's various buildings.
<p>Operational objective 2. Encourage the production of</p>	<ol style="list-style-type: none"> 1. Develop studies on photovoltaic capacity and the potential for installing renewable energy for self-consumption on the UdG campuses.

<p>renewable energy and increase self-consumption</p>	<ol style="list-style-type: none"> 2. Study the feasibility of establishing agreements with local companies in the energy sector on renewable energies offering the roofs of buildings for photovoltaic installations, the ownership of which must be determined in accordance with current legislation and the possibilities of self-financing. 3. Encourage research into renewable energies and design specific teaching modules on these energies (shared action in the field of training and awareness). 4. Encourage the roll-out of renewable energies in the region through the different research groups at the University that can contribute their expertise.
<p>Operational objective 3. Replace fossil fuels with thermal energy needs</p>	<ol style="list-style-type: none"> 1. Define a programme for the gradual replacement of gas boilers by alternative biomass or high-efficiency electrical systems. 2. Study the feasibility of supplying domestic hot water (DHW) with solar thermal energy where required (cafeterias, etc.) and resize the solar thermal facility of the Sports Service. 3. Replace concession company gas cookers and ovens with electrical appliances. 4. Gradually reduce and replace the UdG's vehicle fleet with electric vehicles. 5. Install electric vehicle charging points in eco parking areas on campuses (shared action with the Space Management line).
<p>Operational objective 4. Improve the energy efficiency of buildings</p>	<ol style="list-style-type: none"> 1. Carry out energy audits in all UdG buildings with proposals for improving their energy performance in order to raise their energy category (towards "A" or "B"). 2. Introduce external features for the thermal regulation of buildings to avoid overheating (trees, awnings, shutters, etc.) 3. Define a programme to improve the thermal envelope of buildings (insulation, enclosures, double glazing, thermal bridges, etc.). 4. Define a programme for the progressive replacement of indoor and outdoor lighting with LED technology.
<p>Operational objective 5. Encourage formulas for citizen empowerment such as energy communities</p>	<ol style="list-style-type: none"> 1. Encourage the participation of the entire UdG to create an energy community of renewable energies. 2. Support the initiatives of zero-kilometre energy communities and local consumer cooperatives to make progress in transforming the energy sector.

6.1.3. EMISSIONS INVENTORY

Consolidated projects	<ul style="list-style-type: none"> • Annual mobility survey • Electricity meters for buildings • Thermal calorie consumption meters for buildings • Adherence to the OCCC Voluntary Agreement Programme • Annual quantification of waste volume • Annual Inventory of the Voluntary Agreement Programme
General objective	<ul style="list-style-type: none"> • Provide the UdG with the appropriate procedures to accurately and quickly quantify its carbon footprint, which will be detailed in the emissions inventory and serve as a basis for establishing the annual carbon budget.
General considerations	<ul style="list-style-type: none"> • The carbon footprint must be capable of being accurately quantified. Otherwise, it is impossible either to verify that the reduction objectives are being met or to prioritise those actions that are more effective in terms of the degree of reduction or more efficient in terms of their economic cost. • This emissions inventory, which will have to quantify the annual emissions for each of the items in the carbon budget, does not currently exist. • Of the two major sources of emissions (mobility and energy in buildings), we know precisely what the energy consumption is (electricity and gas). • Mobility can only be estimated from the annual survey, which covers only campus access mobility and is not specifically designed to measure the carbon footprint. • Mobility related to university activity (management, research, student exchange, etc.) is excluded from this survey.
Actions	<ol style="list-style-type: none"> 1. Design a survey for a statistically significant sample of students in order to determine their carbon footprint related to campus access. 2. Design an equivalent survey for PDI and PAS staff or, alternatively, establish a “mobility statement”. 3. Develop a procedure that includes all the management and professional trips made by the UdG and which quantifies the carbon footprint of each one. 4. Design a survey to determine the travel resulting from exchange programmes in which UdG students participate and establish criteria for quantifying the carbon footprint assigned to the UdG. 5. Design a survey to determine the travel resulting from the participation of foreign students in the UdG’s master’s and doctoral programmes and establish the criteria for quantifying the carbon footprint assigned to the UdG. 6. Continue the quantification of the carbon footprint by the concepts that are currently already included in the Programme of Voluntary

	<p>Agreements and in the future adaptation of ISO14064, which will include the emissions of the concession companies.</p> <p>7. Prepare the annual carbon footprint emissions inventory, detailing the contribution of all sections of the carbon budget. The inventory will be presented annually to the UdG's Governing Council.</p> <p>8. Study how the reference carbon footprint will be determined in order to set reduction targets.</p>
<p>Timing</p>	<ul style="list-style-type: none"> Given the importance of the emissions inventory in achieving the objectives and targets of the Greening Plan, it is urgent that the proposed quantification tools be in place within the first year of the Plan.

6.1.4. CARBON BUDGET

As the main objective of the Greening Plan is to combat the climate emergency, the gradual reduction of the UdG's carbon footprint is unavoidable. The main tool for achieving the agreed reduction is the emissions inventory, which should guide the annual carbon budget. This reduction can be aided by external conditions, such as better public transport or the rise of renewable energy. In any event, however, the UdG must fulfil the commitment that has been established. The actions that will be taken to adjust the UdG's activity to the budget will evolve over time thanks to initiatives that must come from all organisational levels and the awareness of the entire university community.

However, the imperative to comply with the agreed annual emission reduction will only be effective if the carbon budget is as clear in the content of its items and in who is responsible for it as is a conventional economic budget. Similar to the economic budget, each year the Governing Council will approve the "available carbon" for the UdG as a whole, i.e. the maximum amount of CO₂ equivalent that the UdG can afford to emit, and how it is distributed among various items. The accounting unit will be the tonnes of CO₂ equivalent (tCO₂-eq) emitted. Available carbon will be reduced year after year to achieve a 50% reduction by 2030 compared to 2011. This reduction target will be moved to the main items, and adjustments will be allowed between the secondary items. Annual emissions will be determined by the emissions inventory. As is the practice established by the economic budget, the current year's surplus or deficit will be carried over to the next year.

6.2. CAMPUS LIFE AREA

6.2.1. WASTE CONSUMPTION AND MANAGEMENT

Consolidated projects	<ul style="list-style-type: none"> • Green purchasing (contract greening) • Comprehensive selective collection plan • University decalogue Zero Waste • Electronic administration
General objective	<ul style="list-style-type: none"> • Encourage responsible consumption, optimise the consumption of resources and prevent the generation of waste at source, in order to move towards the closure of material cycles and to streamline the flow of matter and energy throughout the activity carried out at the UdG and, by extension, that of all concessionaires and suppliers.
General considerations	<ol style="list-style-type: none"> 1. Public procurement accounts for 20% of GDP according to the Spanish Public Procurement Observatory, which means every public authority and every public institution can affect the market for products and services. 2. Given this volume of public procurement, green purchasing in this sector is becoming an important tool for introducing sustainability into procurement policy, with the aim of reducing energy and material flows and preventing waste generation, as well as introducing ethical and fair trade criteria that improve labour rights in the various industrial sectors and supply chains. 3. For the UdG, the purchase and contracting of services has been an important way to introduce environmental and social criteria into the technical specifications of the tenders for service concessions and for purchases, as well as to influence the chain of suppliers and promote the path towards a circular economy model. 4. The UdG has greened the contracts for the cleaning and maintenance of green spaces and gardening, as well as the sustainable and health promotion contracts for cafeteria and vending machine concessionaires. Also in building, reprographics and computer science, while eco-design and eco-labelling criteria have gradually been introduced into products and services, such as street furniture, the purchase of paper, the design of the UdG folder, and so on. 5. The emergence of new products, consumer habits, etc. – in short, the changing reality in which we live – involves reviewing, updating and adapting these purchasing and contracting prescriptions in order to move towards a responsible and decarbonised consumption model.

	<p>6. The Catalan Network of Zero Waste Universities has worked on developing strategies for closing material and energy cycles and minimising waste, so that they affect the production system in a comprehensive and circular way from design to the end of their useful life, along the lines of “cradle to cradle”.</p>
<p>Operational objectives</p>	<ol style="list-style-type: none"> 1. Encourage ethical and responsible consumption that takes into account the three dimensions of sustainability: environmental, social and economic. 2. Optimise water resources with a comprehensive on-campus water cycle management plan. 3. Prevent the generation of waste in line with the Zero Waste strategy in all areas of the UdG: in purchasing and contracting, and in consumption in general. 4. Encourage reuse and preparation for reuse (repair). 5. Ensure an improvement in the quality of selective collection. 6. In general, adopt the circular management model based on cradle to cradle.
<p>Operational objective 1. Foster an ethical and responsible consumption model that takes into account the three dimensions of sustainability: environmental, social and economic</p>	<ol style="list-style-type: none"> 1. Encourage more rational and thoughtful consumption in order to adjust consumption to the real needs of purchasing products and services. 2. Improve and continue the green purchasing model established in all areas of the UdG (eco-labelling, environmental management systems, etc.). 3. Encourage the use of solidarity and fair trade products with a Fairtrade seal or equivalent beyond food products, in line with experiences such as Electronic Watch in the purchase of electronic equipment. 4. Prioritise local consumption (zero kilometre) both in the acquisition of products and in the procurement of services. 5. Encourage sustainable and healthy eating. Include a reduction in the consumption of animal protein, palm oil, sugary drinks and so on in the technical specifications for restaurant and vending concessionaires. 6. Study the feasibility of promoting new forms of citizen empowerment by encouraging the creation or participation of the UdG community in energy communities and local consumer cooperatives.
<p>Operational objective 2. Optimise water resources with a comprehensive on-campus water cycle management plan</p>	<ol style="list-style-type: none"> 1. Incorporate technical improvements into water consumption points to prevent waste. 2. Develop micro-scale infrastructure to promote water saving. 3. Study the feasibility of obtaining water that does not come from the municipal network (groundwater, stormwater catchment, regenerated water, etc.) for certain non-oral uses, such as irrigation, cleaning, sanitation and so on. 4. Design grey/black water recovery systems wherever possible for other uses (irrigation, cisterns, etc.). 5. Install a pilot plant for treating wastewater from buildings.

	<p>6. Study the feasibility of installing a pilot lagoon system integrated into the campus and S&T Park natural environment.</p>
<p>Operational objective 3. Establish mechanisms to promote waste prevention along the lines of the Zero Waste strategy</p>	<ol style="list-style-type: none"> 1. Minimise the consumption of materials and resources by introducing sustainability criteria in the purchase of products and the procurement of services. 2. Minimise the use of products with substances that are toxic and harmful to health and the environment in all services linked to the UdG. 3. Minimise laboratory waste: micro-scale techniques, stock inventory and centralised purchasing, reactivation of the by-product stock exchange, and replacement of the most harmful substances with others that have a lower environmental impact.
<p>Operational objective 4. Encourage reuse and preparation for reuse</p>	<ol style="list-style-type: none"> 1. Design strategies to extend product life: review the duration of computer hardware upgrades, by-product exchanges, combat planned obsolescence, and so on. 2. Make equipment that is renewed available to solidarity organisations and/or students with financial difficulties. 3. Create an exchange to recover products when they reach the end of their useful life at the UdG. 4. Encourage the repair of appliances and objects that have not reached the end of their life cycle.
<p>Operational objective 5. Ensure an improvement in the quality of selective collection</p>	<ol style="list-style-type: none"> 1. Review selective collection infrastructures to optimise their use and efficiency. 2. Schedule the removal of individual and general bins for the non-organic waste fraction to improve the quality of selective collection and, where appropriate, increase selective collection areas in common areas. 3. Study the feasibility of creating a mini-dump on campus and at the S&T Park which facilitates the reuse of devices and objects.
<p>Operational objective 6. Adopt the circular management model based on cradle to cradle</p>	<ol style="list-style-type: none"> 1. Introduce repair networks: repair shops, second-hand and exchange shops and markets. 2. Study the idea of creating a bank of waste/materials for their reuse and transformation so they can go to schools, associations, etc. 3. Encourage research focused on innovation and ecodesign: designing products made with the fewest possible resources and with the least impact on the environment.

6.2.2. SPACE MANAGEMENT

Consolidated projects	<ul style="list-style-type: none"> • Pacification of the Montilivi campus • Ecological gardening • Ecodesign of spaces and street furniture • Biodiversity projects • Environmental itineraries • Eco-Solidarity Vegetable Garden • Sustainable building technical specifications
General objective	<ul style="list-style-type: none"> • Make the various uses and functions of the campuses, whether they are built spaces or those for leisure and people to relate in, compatible with preserving natural and cultural heritage, teaching and research, in order to promote campuses as educational spaces and spaces for sustainability experimentation (campus lab), as well as increasing the surface area of permeable soil, the rehabilitation of buildings and the adaptation of spaces to climate change.
General considerations	<ol style="list-style-type: none"> 1. Didactic campuses are an opportunity for pedagogical innovation that incorporates spaces beyond the classroom, establishing a relationship between the spaces currently available on our campuses and the environment at different levels: urban (university-city relationship), campus (differentiated enclosure), building (architectural element) and classroom. 2. The creation of settings for activity during leisure and rest, for physical and intellectual development, is an indispensable complement to its educational function in the everyday life of a campus, so it is necessary to dilute the campus perimeters in order to incorporate as many features of the surrounding environment as possible. This campus permeability is also an important factor in the development of the teaching campus. 3. The UdG's urban campuses have significant deficits in areas of environmental interest, which makes it necessary to design the spaces by promoting aspects such as cultural and architectural heritage. 4. The peri-urban campuses, apart from the great educational potential they have due to the value of the spaces they comprise, require management that ensures the connection of the green fabric between the various open spaces and also between the buildings. 5. In building processes, the relationship between the building and the immediate, campus-wide environment must be taken into account. This forms an integrated and interrelated space which requires formal, coherent and homogeneous treatment within diversity.

	<p>6. All actions carried out at different scales of action must take into account adaptation to the increase in extreme phenomena and their changes in the return periods.</p>
<p>Operational objectives</p>	<ol style="list-style-type: none"> 1. Exemplary management of campus spaces. 2. Incorporate climate change adaptation measures into new projects and refurbishment. 3. Assess the cultural/natural heritage of university campuses and their surroundings. 4. Foster campuses as active learning spaces. 5. Offer campus/city synergy settings: create multi-purpose (outdoor/indoor) teaching and leisure spaces open to the public (agoras).
<p>Operational objective 1. Exemplary management of campus spaces</p>	<ol style="list-style-type: none"> 1. Design campus spaces so they contribute sustainable values to both urban development and building. 2. Turn campuses into laboratories for experimentation in sustainability such as comprehensive water cycle management, maintenance with organic gardening, eco-social projects, bioconstruction, etc. 3. Introduce ecodesign criteria into the treatment of relational spaces and recreation areas and also the connection between different spaces. 4. Include sustainable building criteria in technical specifications in order to achieve environmental certifications (e.g., LEED) both in new construction projects and in building rehabilitation and regeneration. 5. Design ECO parking areas equipped with charging points for electric vehicles with photovoltaic roofs and also exclusive parking spaces for users of the Fes edit platform. 6. Gradually reduce (at the same rate of reduction as that set by the carbon footprint) the area for parking internal-combustion cars, in favour of electric cars and an improvement of life on campus.
<p>Operational objective 2. Incorporate climate change adaptation measures into new projects and rehabilitation.</p>	<ol style="list-style-type: none"> 1. Include vegetation as a thermal regulation element and to create shaded spaces as a heat-wave adaptation measure. 2. Carry out actions to reduce the possible effects and risks associated with storms, erosive processes, floods, snowfalls, etc.
<p>Operational objective 3. Assess the cultural/natural heritage of campuses and their surroundings</p>	<ol style="list-style-type: none"> 1. Ensure the uniqueness of each campus and its surrounding spaces is preserved, as well as the natural dynamics. 2. Facilitate the infiltration of run-off water: seek a balance between built-up areas and natural/greened/landscaped areas. 3. Foster biodiversity and the conservation of natural spaces on campus and in the immediate environment: inventories of flora and fauna, control of invasive species, etc. 4. Design itineraries that highlight the cultural and natural heritage of the campuses.

<p>Operational objective 4. Encourage reuse and preparation for reuse</p>	<ol style="list-style-type: none"> 1. Encourage diversification, innovation and sustainability research on each campus. 2. Facilitate learning processes by solving real, contextualised problems on campus. 3. Experiment with different innovative learning methodologies such as Living Labs, Service Learning, co-creation spaces, etc., depending on each project on the same campuses. 4. Integrate bachelor's/master's theses and external internships for projects and solutions on campus (action shared with the Training for sustainability line). 5. Adapt both indoor and outdoor teaching spaces with flexibility and versatility criteria, so as to facilitate the programming of teaching activity within the current context of very diverse demand, blended learning and teaching, etc.
<p>Operational objective 5. Campus/city synergy settings: create multipurpose teaching and leisure spaces (outdoor/indoor) open to the public (agora)</p>	<ol style="list-style-type: none"> 1. Organise activities with the general public in which campus greening projects can be highlighted. 2. Design guided environmental and cultural itineraries offered by UdG students, open to schools and the general public. 3. Offer schools campus spaces for learning activities on sustainability (temporary CM pond, soil cuts, etc.).

6.3. TRAINING AND AWARENESS

6.3.1. TRAINING FOR SUSTAINABILITY

<p>Consolidated projects</p>	<ul style="list-style-type: none"> • Research line: Curricular Greening in Higher Education (ACES in Catalan/Spanish) at the UdG • Cross-cutting competence in sustainability • Participation in the European UE4SD (2013-2016) project • International Summer School on the Environment (IMA) • Introduction to Sustainability Course (UCS capsules) • PAS and PDI staff training (CRSS_UdG workshops) • ICE teacher training course on Education for Sustainability (SDGs) • Teaching Innovation Network (XID) on the SDGs in Teaching at the Institute of Education Sciences (ICE) • CRUE-Sustainability Curricular Sustainabilisation Group • EUSRExcel project
<p>General objective</p>	<ul style="list-style-type: none"> • Give students a thorough grounding so they can respond to the socio-environmental challenges of present-day society. This requires a sustainable approach to teaching and research, as well as social leadership and governance, in order to make progress on preserving the natural environment and promoting the circular economy and social justice. • Base teaching on Education for Sustainability principle, in line with the SDG roadmap in response to the proposal of the UdG2030 Strategic Plan.
<p>General considerations</p>	<ol style="list-style-type: none"> 1. With the aim of moving definitively towards a sustainable model so we can meet the great challenges posed by climate change and the emergency situation that stems from it, the UdG, in addition to setting an example with management, cannot ignore its main task as a public service: education, training and research. In that regard, it is absolutely essential in educating and training students to introduce knowledge, criteria and values that allow them, in the future, to exercise their profession in an ethical, responsible and environmentally and socio-economically friendly way. 2. The complexity of environmental issues means that they occupy a multidisciplinary field. There is a considerable diversity of variables involved and, therefore, of disciplines and areas of knowledge, which points to the need to focus on comprehensive training among citizens who will make decisions on different levels, and in all the specific degrees taught at the university. 3. Accordingly, in addition to sustainability principles and values, it is necessary to introduce and/or improve curricular

	<p>environmental content in order to awaken a proper understanding of the environment and the possible repercussions on professional practice. It is also about developing, coordinating, encouraging and creating synergies in sustainability research, both that which incorporates its three dimensions (environmental, social and economic) as well as basic and specific research in different areas, which generates knowledge of issues related to sustainability.</p>
<p>Operational objectives</p>	<ol style="list-style-type: none"> 1. Design flexible curricula that include content, methodologies, forms of assessment and practices that, from an Education for Sustainability approach, demonstrate the indissoluble relationship between the environmental, social and economic dimensions of the environment. 2. Offer specific training in Education for Sustainability and its practical resources, aimed at students regardless of their area of study. 3. Offer specific training in Education for Sustainability and its practical resources, aimed at teachers regardless of their area of study. 4. Encourage interdisciplinary/transdisciplinary groups to work on the complexity, systemic vision, and concept of uncertainty needed to address the multicausality of environmental issues. 5. Create spaces for reflection, participation and co-creation with internal and external stakeholders to guide actions towards sustainability in its three dimensions: social equity, the development of a circular economy and ecological balance. 6. Encourage the contextualisation of academic work and research in order to respond to global problems from local challenges (Glocal). 7. Contribute the knowledge generated by the scientific community to developing the best solutions to the climate emergency.
<p>Operational objective 1. Design flexible curricula that include content, methodologies, forms of assessment and practices that demonstrate the indissoluble relationship between the environmental, social and economic dimensions</p>	<ol style="list-style-type: none"> 1. Encourage curricular flexibility and disciplinary permeability. 2. Define specialisation itineraries specialising in sustainability for the degrees offered by the UdG interested in their development. 3. Develop and apply sustainability self-assessment formulas linked to the institution's quality system.
<p>Operational objective 2. Offer specific training in Education for</p>	<ol style="list-style-type: none"> 1. Roll out cross-cutting competence in sustainability to identify socio-environmental and economic implications, both from a general and field of knowledge point of view.

<p>Sustainability and its practical resources, aimed at students regardless of their area of study</p>	<ol style="list-style-type: none"> 2. Define a cross-disciplinary competence assessment system that is capable of assessing the integration between knowledge, skills and attitudes. 3. Design subjects with active learning techniques that allow students to reflect on and make proposals for sustainability action based on the knowledge of the degrees. 4. Design a participatory workshop of at least 20 hours of work for each UdG campus that can have credit recognition for students. 5. Include sustainability in assessing bachelor's and master's theses.
<p>Operational objective 3. Offer specific training in Education for Sustainability and its practical resources, aimed at teachers regardless of their area of study</p>	<ol style="list-style-type: none"> 1. Develop cooperatively, with interdisciplinary groups of teachers linked to the ICE, teaching units around a sustainability problem so they can be incorporated into the topics and programming of the respective subjects. 2. Promote the inclusion of this teacher training in the teaching and research staff activities plan and their participation in the pilot plans that are derived from it.
<p>Operational objective 4. Encourage interdisciplinary/trans disciplinary groups to work on the complexity, systemic vision, and concept of uncertainty needed to address the multicausality of environmental issues</p>	<ol style="list-style-type: none"> 1. Strengthen disciplinary flexibility and permeability through the incorporation of interdisciplinary work projects between different areas and subjects. 2. Develop the interdisciplinary training project within the framework of the Teaching Innovation Network (XID) and the Teaching Innovation Groups (GID) for internal training and preparation of materials. 3. Support the UdG XID and GID experts on SDGs to create and implement free Massive Open Online Courses (MOOCs) on sustainable development.
<p>Operational objective 5. Create spaces for reflection, participation and co-creation with internal and external stakeholders to guide actions towards sustainability in its three dimensions: social equity, the development of a circular economy and ecological balance</p>	<ol style="list-style-type: none"> 1. Give the Doctoral School, postgraduate centres, institutes and research groups a sustainability approach that enables them to prepare master's and interdisciplinary theses and work on responding to the challenges of sustainability.
<p>Operational objective 6. Encourage the contextualisation of</p>	<ol style="list-style-type: none"> 1. Incorporate the study and treatment of local/global environmental issues and strengthen collaboration with local entities. 2. Link the knowledge and skills generated by the actions of UCS, CRSU and other structures related with teaching and research, on

<p>academic work and research in order to respond to global problems from local challenges (Glocal)</p>	<p>the understanding that they lead partnerships with local, national and international institutions and organisations.</p>
<p>Operational objective 7. Contribute the knowledge generated by the scientific community to develop the best solutions to the climate emergency</p>	<p>1. Strengthen the interaction mechanisms with public authorities and entities in order to facilitate the transfer of knowledge towards a sustainable model.</p>

6.3.2. ENVIRONMENTAL COMMUNICATION

Consolidated projects	<ul style="list-style-type: none"> • Social Commitment Unit social media • Sustainability Area website • Sustainability Area chat • UdGCO2mpensa • Environmental calendar • Environmental resources map
General objective	<ul style="list-style-type: none"> • Establish communication mechanisms aimed at raising awareness of environmental issues, promoting environmental education in terms of changing values, habits and attitudes of respect for the environment and, consequently, to act/participate individually and collectively in solving present and future environmental challenges.
Operational objectives	<ol style="list-style-type: none"> 1. Make the Greening Plan and the actions that derive from it known to the entire university community and to the general public. 2. Design environmental awareness campaigns in line with major local and global environmental challenges. 3. Green the "communicative action" by dematerialising it and reducing the impact of the materials used in dissemination. 4. Establish environmental protocols for organising events that include dissemination of the UdG's commitment to sustainability. 5. Establish mechanisms for each member of the UdG community to have access to a carbon fingerprint meter and, where appropriate, offset emissions.
Operational objective 1. Make the Plan and the actions known to the entire university community and to the general public	<ol style="list-style-type: none"> 1. Use all internal communication channels to report periodically on the evolution of the Plan. 2. Communicate the specific information of each centre through the greening committees. 3. Take advantage of the different acts and events organised inside and outside the UdG to make the Plan known. 4. Collaborate in city and provincial projects in which sustainability is promoted and the UdG transfers its expertise.
Operational objective 2. Design environmental awareness campaigns in line with major local and global environmental challenges	<ol style="list-style-type: none"> 1. Support environmental awareness campaigns as tools for raising awareness among the university community. 2. Take advantage of major events and anniversaries to focus on environmental issues and make the UdG's contribution of to tackling them known (environmental calendar). 3. Participate actively in the information and awareness-raising strategies promoted by different bodies and institutions, especially those in the university field such as the CIC-ACUP on a Catalan level and the CRUE on a Spanish level, and international university networks such as Copernicus.

<p>Operational objective 3. Greening of the “communicative action” dematerialising it and reducing the impact of the materials used in dissemination</p>	<ol style="list-style-type: none"> 1. Develop communication strategies in the field of eco-publishing as an innovative model for managing publications in terms of sustainability. 2. Tend more and more towards the dematerialisation of communication taking advantage of digital formats and new information technologies.
<p>Operational objective 4. Establish environmental protocols for organising events that include the dissemination of the UdG’s commitment to sustainability</p>	<ol style="list-style-type: none"> 1. Develop strategies for organising virtual events in order to reduce the environmental impact. 2. Develop new environmental protocols for face-to-face events that include calculating the carbon footprint and offering the ability to compensate for it. 3. Take advantage of events to publicise the UdG’s Greening Plan and event greening protocols.
<p>Operational objective 5. Establish mechanisms for each member of the UdG community to have access to a carbon footprint meter and, where appropriate, offset emissions</p>	<ol style="list-style-type: none"> 1. Update and give a further impulse to the UdGCO2mpensa project, as a tool for calculating individual emissions and the possibility of offsetting them in cooperation projects linked to the UdG 2. Introduce the emission calculator of the Voluntary Agreements Programme run by the Catalan Climate Change Office so that each member of the community can use it individually or with the groups around them