### LIÈGE université

## ACTIVITY REPORT Sustainable Development 2020-2021

### Preamble

Faced with the major challenges of a world in transition, universities have a particular responsibility: they contribute to a better understanding of contemporary issues, cooperate in favour of sustainable development, train their students so that they can act on their environment, innovate to develop solutions to environmental, social and economic problems.

The University of Liège is no exception. This first edition of the sustainable development report highlights the diversity and complementarity of the projects carried out in this perspective by the institution and by the university community. It cannot be exhaustive, since the University's

activities are so closely linked to the preservation of the environment, the strengthening of solidarity and the development of a more sustainable economy; on the contrary, it is designed to be a portal to this diversity, by referring, whenever possible, to extended presentations of the community's initiatives. It will be completed each year with a new version and new projects, complementing our website www.durable.uliege.be.

We hope that this report will enable everyone to appreciate the progress we have made so far, and to measure the extent of the transformations needed to meet the challenges we face.

**Prof. Jean Winand** First Vice-Rector President of the Scientific Council for Sustainable Development

### Prof. Rudi Cloots

Vice-Rector President of the Coordination Council for Sustainable Development





## Sustainable Development Goals

## **BJECTIFS** DE DÉVELOPPEMENT DURABLE



GOAL 1.

Access to basic human needs of health, education, sanitation.



GOAL 2.

GOAL 3.

**Providing food** and humanitarian relief, establishing sustainable food production.



Better, more accessible health systems to increase lifeexpectancy.

GOAL 4. Inclusive education to enable upward social mobility and end poverty.



Education regardless of gender, of equality

women.



GOAL 5. advancement facilities. laws, fairer representation of

GOAL 6. Improving access for billions of people who lack these basic



GOAL 7.

Access to renewable. safe and widely available energy sources for all.

GOAL 8. Creating jobs for all to improve living standards, providing

sustainable economic growth. In 2015, the members of the United Nations (UN) adopted the 2030 Agenda. This agenda defines **17 Sustainable Development Goals** (SDGs, see below), broken down into 169 more specific targets. They aim to address urgent global social, environmental and economic challenges. This agenda is deeply rooted in the fight against inequality, the well-being of populations, and the protection of the environment in its broadest sense. Since the adoption of the agenda, states, institutions, communities, and private and public organisations have largely appropriated the 17 SDGs, which influence the analysis and orientation of their policies in favour of sustainable development.

Universities play a major role in achieving these major objectives, through research, teaching and community services. Many universities are taking on this responsibility and are committed to improving understanding of the challenges of sustainable development, developing the skills needed to implement concrete solutions, strengthening research and innovation related to these societal challenges, reinforcing local and international collaborations in favour of the SDGs, and, above all, acting in favour of the transition towards sustainability in all internal operations.

This sustainable development report highlights ULiège's contribution to these global challenges. The report systematically references the 17 SDGs when presenting our actions.



### Partenariats



To support this transition towards a more sustainable world, the University of Liège has entered into several partnerships. These networks allow the University to benefit from the expertise and experience of other institutions which have adopted a similar approach, and to be part of a collective approach favouring the coordination of actions and the sharing of resources.

Each membership is subject to prior evaluation and a decision by the academic authorities..

ULiège is a permanent member of the Commission du Développement durable (Commission for Sustainable Development) of the Académie de Recherche et d'Enseignement supérieur (Academy of Research and Higher Education) of the Wallonia-Brussels Federation. The Commission promotes the exchange of experiences between higher education actors, develops collaborative tools in order to create a community of resources/actors and elaborates recommendations on institutional sustainable development policies for the academic and political authorities of the Wallonia-Brussels Federation.

The Commission also organises an annual call for projects with funding of €200,000. In 2019 and 2020, 19 projects were funded, including 2 led by ULiège.



## **Š¦iFT**

The Belgian platform The Shift brings together more than 500 organisations, public institutions, companies, associations and universities, which are committed to working together to achieve the goals of sustainable development. The network organises sustainable initiatives and the sharing of experiences between members. ULiège has been a member of The Shift since October 2020 and has signed its charter, committing us to working in partnership with local and international actors in favour of sustainable development.





In 2021, the University of Liège started the procedure to become a member of the International Sustainable Campus Network (ISCN), one of the world's largest networks of universities committed to sustainable development. The ISCN is both a forum for member universities and a platform for developing collaborative projects.

## **2** Sustainable Development Goals at ULiège

The University community's growing awareness of the challenges of sustainable development has been accompanied by an increase in institutional, collective and individual initiatives. The number of stakeholders has also increased considerably (students, administrative, scientific and teaching staff) and the dynamics of their actions have continued to diversify.

In 2019, the University created a Sustainable Development Unit to coordinate institutional projects, support members of the university community in their initiatives and inform the community of ongoing projects. This Unit has two advisory bodies responsible for making proposals to the Board of Directors: a Coordination Council and a Scientific Council. The Institution has also created a Green Office to support the projects of the student community.

Le Conseil scientifique du Développement durable (Scientific Council for Sustainable Development) is responsible for developing institutional policy proposals and supporting sustainable development projects. The Scientific Council assigns working groups to examine dossiers, the results of which are submitted to the entire Scientific Council for approval. The Scientific Council is chaired by the First Vice-Rector and comprises 31 members with expertise in one or more areas of sustainable development. The diversity of the members' profiles makes it possible to mobilise experts in all the fields concerned and to solicit, through them, other experts in related fields.

Le Conseil de coordination du Développement durable (Sustainable Development Coordination Council) examines the operationalisation of sustainable development strategies and the integration of sustainable development practices into the functioning of the Institution. It is composed of the Vice-Rector in charge of Infrastructure and Student Life, its president, and eight other members representing the administrations and sustainable development coordination entities. The Coordination Council also has a role of articulation with the other councils and commissions that organise the activity of the University, such as the infrastructure commission, the energy commission, the steering committee for international relations, etc.

The Green Office officially came into being on 20th January 2020, by decision of the ULiège Board of Directors. It is composed of a multidisciplinary team of about forty students from all faculties. The students work for the Green Office as part of a student job, as volunteers or as trainees. The team is led by a scientific coordinator and an assistant coordinator and is supported by numerous experts from ULiège. The team is open to all students who wish to use their talents and creativity in actions and projects to improve the sustainability of ULiège.

> GREEN OFFICE PRESENTATION VIDEO

## **3** Institutional Projects for a More Sustainable University

### Through its environmental charter, adopted in 2013, ULiège is committed to reducing the environmental impact of its activities.

3.1 Reduction in energy consumption and a move towards more renewable energies

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- 3.2 Sustainable and solidarity-based food
- 3.3 Waste Disposal
- 3.4 Mobility
- 3.5 International Travel
- 3.6 Fighting against inequality and discrimination
- 3.7 Financial Investments

### 3.1 Reduction in Energy Consumption and a Move Towards More Renewable Energies



### **ALTERNATIVE ENERGY**

In 2012, ULiège invested in a biomass cogeneration unit to supply the Sart Tilman heating network. ULiège also has seven photovoltaic installations (ranging from an installed capacity of 2 to 466 kWp), of which it consumes almost 100% of the production. The production of these installations is visible online and in real time. These investments allow the University to drastically reduce its environmental footprint.

Thanks to these installations, approximately 40% of ULiège's thermal energy needs, and 25% of its electricity needs, are produced in a renewable way. Coupled with better management of the production systems, these installations have enabled ULiège to reduce its  $CO_2$  emissions by 42% in 2018 compared to the 2005 level, i.e. 50 kg of  $CO_2$  /m<sup>2</sup> /year.



### **RENEWABLE ELECTRICITY INSTALLATIONS AT THE UNIVERSITY**

	PANEL SURFACE (M <sup>2</sup> )	Installed power (kWc)	Yearly average (MWh)
Pellet heating (2012)	/	2500	10,000
Sart-Tilman Car Park (2017)	2670	466	450
20-Août (2019)	293	60	56
Clinique vétérinaire (2019)	198	33,8	31
Botanique (2019)	144	26,4	24
Translation-Interpretation (2019)	93	18	17
Résidence 48 (2018)	40	5	4,5
Montéfiore (208)	20	3	3

Source infographic : https://www.durable.uliege.be/cms/c\_11822840/fr/politique-energetique-de-l-uliege-quelques-chiffres



#### **ENERGY RENOVATIONS**

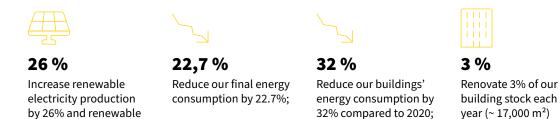
ULiège is committed to the renovation of numerous buildings in order to improve their energy performance. In 2014, this programme benefited from a grant from the European Energy Efficiency Fund (EEEF) which enabled preparatory studies to be carried out for the renovation of 11 buildings on the Sart Tilman campus (Botany Institute - Physics Institute - Chemistry Institute - CHU Liège). In total, ULiège, CHU Liège and GRE-Liège will have invested 32.5 million euros in the renovation of 11 of their buildings, representing more than 200,000 m<sup>2</sup> of floor space, enabling savings of 19,277 MWh in primary energy and 2,717 tonnes of CO<sub>2</sub>. These exemplary operations have been awarded the 2019 Grand Prix de l'Architecture et de l'Urbanisme by the City of Liege and are currently being finalised.

While total energy consumption and overall  $CO_2$  emissions continued to increase between 2005 and 2018, it is important to take into account the fact that the number of buildings has grown considerably since 2005 and that renovation work was not completed during that time: the  $CO_2$  emission ratios per square metre and per person actually decreased over this period.

With regard to Belgium's National Energy and Climate Plan 2021/2030, ULiège has set the following objectives:

in line with all other

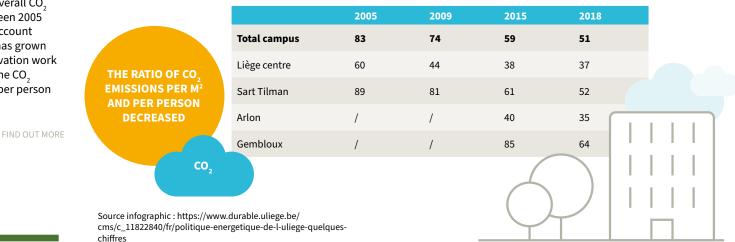
public institutions.



### EVOLUTION OF THE CO, EMISSIONS RATIO BY SURFACE (KG/M<sup>2</sup>)

heat production by

55%;





### **REDUCING WATER CONSUMPTION**

ULiège reduced its water consumption by almost 60% between 2005 and 2018, from 19 to 8 m<sup>3</sup> per year per person (students and staff).

This reduction was achieved by replacing waterloss devices, improving the maintenance of the water network on the Sart Tilman campus and raising user awareness.

As part of its new maintenance contract (which started in December 2018), ULiège plans to reduce water consumption on the Sart Tilman site by 4%, i.e. more than 8,000 m<sup>3</sup>, thanks to an ambitious investment plan.

At the same time, in 2019, ULiège embarked on the monitoring of two pilot installations -Central building (A1) and the water network on Sart Tilman - in order to follow real-time water consumption and to diagnose any malfunctions (such as leaks) as quickly as possible. This system replaces the old quarterly readings, which did not allow for rapid detection of consumption issues or leaks.

Since then, ten more buildings have been equipped with this system.

FIND OUT MORE

### 3.2

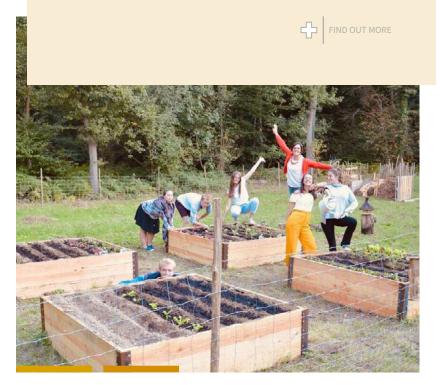
## Sustainable and Solidarity-based Food





### COLLECTIVE VEGETABLE GARDENS ARE SPRINGING UP ON CAMPUS

In small groups, members of the ULiège community regularly put on their gardening gloves for a lunch break or afterwork session. The campus offers them an ideal place to grow seasonal fruits and vegetables, which are then shared.







### NEARLY 8,000 ORGANIC SOLIDARITY BASKETS DISTRIBUTED TO STUDENTS

In the context of the health crisis, ULiège sought to help its students. An operation, launched in partnership with the Ceinture Aliment-Terre Liégeoise, enabled free baskets, containing fresh fruit and vegetables, eggs or pasta, chocolate, etc., to be distributed each week. Soup and female sanitary products were added during the operation.

Each week between 4th February and 24th June 2021, an average of 300 to 350 baskets were distributed in Liège (20-Août cafeteria), 50 on the Gembloux Agro-Bio Tech campus and 25 on the Arlon campus. In total, nearly 8000 organic "solidarity baskets" were distributed (without the need for registration, simply given on presentation of an ULiège student card).





### **CREATION OF A SOLIDARITY GROCERY SHOP**

For several months now, ULiège has been working with its partners in the Liège-Luxembourg Academic Pole on the creation of a solidarity grocery shop. This will enable students to acquire quality food products and basic necessities at low prices. With the support of ARES, the institutions concerned organised a major survey in 2020 to find out the expectations of potential users and to develop an offer that is both accessible and eco-responsible. The solidarity grocery shop will open its doors in the centre of Liège in the first quarter of 2022.







#### **RESTAURANT SUPPLIER**

In January 2020, the public contract for the supply of food products was awarded to COMPAS GROUPE BELGILUC. Their values reflect the Institution's environmental policy, by putting forward 14 main points of sustainable management. Namely to:

1. prioritise fresh, whole, unprocessed products and "home-made" preparations,

- 2. give preference to local and seasonal products,
- 3. reduce animal proteins, favour meat from non-intensive farms and balance menus with vegetable proteins,
- 4. avoid using endangered species and include products from sustainable fishing,
- 5. privilégier des produits issus de l'agriculture biologiquegive preference to products from organic farming,
- 6. give preference to fair trade practices for exotic products,
- 7. give preference to "short circuit" purchases,
- 8. use ancient and local varieties of cereals, fruits and vegetables,
- 9. reduce food waste and organise the redistribution of unsold food to associations,
- 10. reduce packaging and waste and encourage the use of eco-responsible consumables,
- 11. encourage the consumption of tap water,
- 12. promote the pleasure of taste and conviviality,
- 13. encourage socially responsible management of human resources,
- 14. use environmentally friendly cleaning products.



## 3.3 Waste Disposal



### **RECYCLING AND WASTE SORTING**

ULiège is working to generalise the selective collection of waste in all its buildings. To this end, 290 small bins were recently delivered for the meeting rooms and refectories, and 237 containers were installed in the corridors and on the landings.

The figures below illustrate the evolution of waste at ULiège (excluding the Arlon and Gembloux campuses).

FIND OUT MORE

	2018	2019	2020	Unit
Tonnes of residual waste (excl. GxABT and Arlon)	524	576	363	Tonnes/year
Tonnes of cardboard/paper waste (excl. GxABT and Arlon)	206	270	251	Tonnes/year

## 3.4 Mobility

The daily commute of employees and students generates a significant part of ULiège's environmental impact. Reducing this impact is a particular challenge that requires the implementation of a mobility policy and concrete actions.



### **MOBILITY ACTIONS**

At its meeting of 19th February 2020, the Board of Directors approved the University's internal mobility policy.

In order to meet the objectives set, the action plan accompanying the mobility policy strategy sets out a series of measures to be implemented, which can be classified as follows:

- 1. Infrastructure and network operation projects
- 2. Accompanying measures

3. Communication and experimentation actions

CARPOOLING PLATFORM number of people interested

**3,152** Octobre 2017

**9,032** Octobre 2018



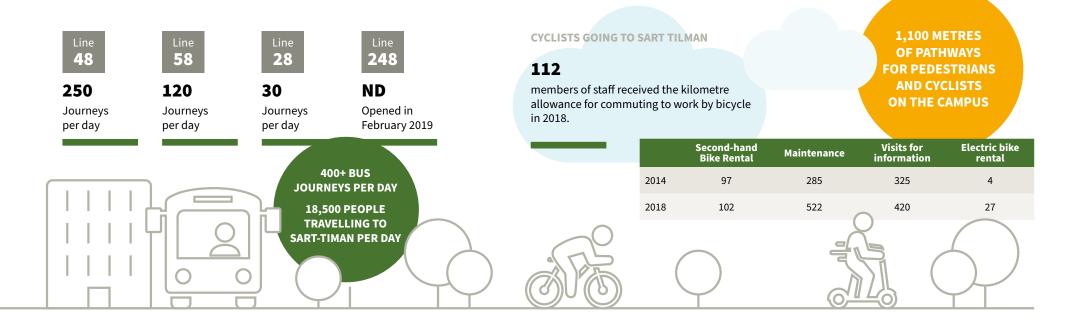
In concrete terms, ULiège is witnessing significant changes in mobility. The figures below show encouraging developments in three trends: carpooling, the frequency of bus journeys, and the number of cyclists cycling to Sart Tilman from Angleur (50 per day on average). This journey, which requires a certain amount of effort, illustrates the growing determination of members of the Institution to trade motorised mobility for "soft" mobility. At the same time, ULiège continues to loan electrical bicycles to members of staff for periods of four weeks, charging stations are available on the various campuses and various events are organised as part of our mobility week.

The figures presented below are taken from the Sustainable Development Dashboard and are for 2018, 2019 and 2020.

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FIND OUT MORE

Modal share of car journeys (Sart Tilman)	44,1%
Modal share of carpooling journeys (Sart Tilman)	16,2%
Modal share of bus journeys (Sart Tilman)	36,3%
Modal share of bike journeys (Sart Tilman)	1,8%



## 3.5 International Travel

Aviation is a major concern in the context of climate change: this mode of transport produces high greenhouse gas emissions and the number of kilometres travelled is growing. Universities contribute to this growth through the nature of the activities they develop, often on an international scale, such as research and teaching trips, scientific events or academic collaborations.

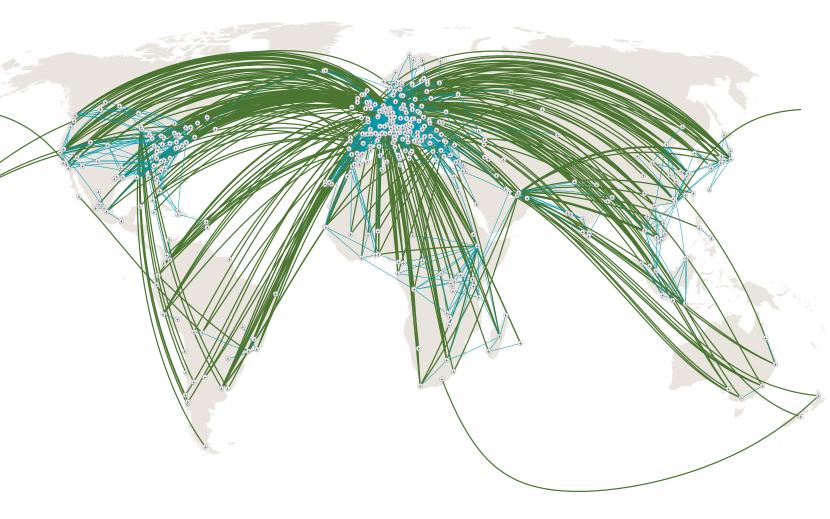
The 2021 carbon footprint results determined that staff members made 9,440 separate flights in 2019. These were spread over 970 different routes for a cumulative annual total of 27 million kilometres, responsible for the equivalent of 5,809 tonnes of  $CO_2$ , i.e. 6.1% of ULiège's carbon impact. Around 10% of these emissions concern flights of less than 1,000 kilometres.

These figures should be compared with the 2 million kilometres travelled by train for international trips over the same period.

The Scientific Council will soon submit a proposal to the Board of Directors with the aim of reducing the number of journeys by air by combining information and awareness campaigns for the members of the University community, and encouraging them to reduce the number of journeys by air and develop alternative means of communication.

Mode	Distance	Comments
Car	3,093,158 km	National and international journeys
Train	1,977,402 km	International journeys
Plane	26,986,442 km	International journeys

#### **PLANE JOURNEYS TAKEN BY STAFF IN 2019**



## 13 CLIMATE

### SAVE THE CLIMATE" GRANT FOR ERASMUS TRIPS

More and more students are seeking to reduce their carbon footprint, particularly in the context of Erasmus stays. ULiège supports and encourages these considerations, and offers a grant to encourage students who take such trips in Europe to travel by train or bus rather than by plane.



Distance between airports (or to Liège) and number of tickets

 =< 4,000 km
 > 4,000 km

- =< à 10 journeys</li>
  11 à 25 journeys
- 51 à 100 journeys
- —\_\_\_\_ 100 à 180 journeys

Author : Marc Binard, ULiège, 2021 Source : ULiège / ARF, 2019

### 3.6 Fighting Against Inequality and Discrimination



### **#RESPECT CAMPAIGN**

At the start of the 2019-20 academic year, ULiège launched the #RESPECT campaign: self-respect, respect for others, respect for diversity, etc. Throughout the year, the campaign focused on different aspects revolving around fundamental moral values, such as the fight against harassment, the use of non-violent communication, equality in language, etc.

What is harassment? How does it manifest itself? Is it punishable by law? What is the importance of the role of witnesses? What is slut-shaming? In February 2020, posters and videos distributed to the entire ULiège community highlighted the sensitive issue of harassment. At the same time, the University of Liège trained "people of trust" who could confidentially receive testimonies or calls for help in the event of harassment, violence or disrespect. Throughout the year, several dates were offered to staff for training sessions on nonviolent communication.

Finally, in collaboration with the Gender Working Group, ULiège published a practical guide entitled "Equality in Language" and proposed a series of recommendations on the subject to its community.



Le pire ce n'est pas les remarques les pressions le malaise l'humiliation c'est que personne ne réagit.	Il se sentait très fort tout puissant irréprochable dans son droit avant qu'un <sup>.</sup> e collègue lui demande d'arrêter.
Et si au lieu de commenter mes jambes ma robe mon décolleté ma démarche vous commentiez ma recherche ?	Vos blagues homophobes sont si bien trouvées si originales si drôles que je peux désormais les raconter au tribunal.
Content of the second s	Control of the formation of the formatio
#RESPECT L'ULiège s'engage !	Égalité Responsabilité Diversité Liberté Reconnaissance

#RESPECT

## 3.7 Financial Investments

In 2016, ULiège committed to exiting all investments directly linked to fossil fuels within 5 years and to no longer make new investments based primarily on oil, coal or natural gas. As of 31<sup>st</sup> December 2018, although the 5-year transition period had not yet ended, ULiège no longer held any investments directly linked to fossil fuels.

Furthermore, following the specific notes in the successive calls for tender since 2015, the percentage of investments with an "SRI (Socially Responsible Investment) and/or ethical" label has increased every year, as expired products are increasingly replaced by socially responsible ones.

SRI products are investments that aim to reconcile economic performance with social and environmental impact, by financing companies and public entities that contribute to sustainable development, regardless of their sector of activity. By influencing governance and behaviour, these products promote a responsible economy. In practice, these products, which at the end of 2016 represented 19% of the investments made within the framework of the University's structural management, have gradually represented an increased share of the investment portfolio. Thus, as of 31st December 2020, SRI/ ethical investments represented more than 35% of our structural management investments (compared to 30% as of 31st December 2019). It should also be noted that most fund managers, even if they do not yet have an official SRI label for their products, are increasingly integrating a sustainability policy into their management and are excluding companies with a significant negative impact on climate change.

## **4** Green Office

Since its launch, the Green Office has designed an innovative programme that aims to engage all ULiège students in the transition to sustainable development. This programme consists of a series of integrated activities, ranging from raising awareness of sustainable development to acting in favour of the SDGs.



### STUDENT AWARENESS

As regards raising students' awareness of sustainable development issues, the members of the Green Office have prepared several training sessions on specific themes: responsible behaviour, sustainable food, carbon off-setting and reforestation projects, water quality in Wallonia, mobile phone recycling and circular economy, etc.

The **Midis du Green Office** (lunchtime sessions) bring together students and the University community for conferences highlighting the courses and research which, at ULiège, focus on the issue of sustainable development. The first two lectures were on sustainable marketing (focus on the "nudging" technique) and students' carbon footprint.

**Green Office Workshops** are organised regularly by students. A three-hour workshop dedicated to climate, given by a team of ULiège facilitators, members of the Green Office, Eclosio, Venturelab, S'Lab (HEC), Réjouiscience and the Réseau des Doctorants, provided an opportunity to share the most rigorous scientific knowledge (latest IPCC reports) on the causal links of climate change.

Finally, several **workshops on zero waste** were shared by the students, via live video broadcasts on social networks.

### **ACTIONS FOR AND BY OUR STUDENTS**

In order to engage as many students in sustainability projects as possible, the Green Office has chosen to work closely with the students in order to both understand their needs and expectations and to offer them the possibility of being involved in each of the project stages. This desire to engage students as much as possible is reflected in the decision to have a vote (to choose the 5 themes of the Sustainable Campus projects from a range of 20 ideas), two hackathons (to allow the exchange of ideas around the projects) and two surveys (to understand the students' expectations and gather their opinions on the projects).

### ACTIONS BASED ON OUR CAMPUSES: FIVE FIRST SUSTAINABLE CAMPUS PROJECTS

These projects were chosen by the student community during a voting campaign via the Citizenlab platform in February 2020.

**EcoPack:** for the start of the 2021-2022 academic year, the Green Office produced and distributed a pack containing sustainable products to help students change their consumption habits. As part of this project, responsible consumption challenges are being suggested (see below).

**0 Déchet dans mon kot :** this year, the Green Office shared tips and tricks to reduce waste production at home: zero waste meals, training on how to make sustainable cosmetics and cleaning products, etc. Filmed demonstrations were posted on social networks and tips were shared in an Advent Calendar in December.

**Court-Circuit :** to raise awareness and support students wishing to consume sustainable food, the Green Office has developed several educational tools, including a decision tree, a quiz game, a summary table with consumer foods and their impact throughout their life cycle, and recipes with products that are good for our health, the local economy and the environment.

As soon as the health situation allows, the Green Office will promote fruit and vegetables grown by local farmers through the provision of baskets on the Sart Tilman campus.

**Water4All :** from the start of the academic year 2021-2022 the Green Office will promote the consumption of tap water by providing free "fountain" water to fill water bottles in places with high student footfall. 3 New water fountains have been installed at B4, B7a and B5b.

**GSM2Life :** In autumn 2021, the Green Office will offer a first collection of old smartphones for recycling. Solutions for repairing phones, or buying them second-hand, will be highlighted, as will the impact of the over-consumption of these devices.

### **REFORESTATION PROJECT**

To symbolise its commitment to sustainable development, ULiège offered a tree to each new student enrolled on a first-year Bachelor's programme. This project took shape with the planting of the first 2,000 seedlings by students from the forest management school, ERAIFT (École Régionale postuniversitaire d'Aménagement et de gestion Intégrés des Forêts et des Territoires tropicaux), in the Luki biosphere reserve in the Democratic Republic of Congo. It was the Green Office students, in collaboration with the "Forest is Life" experts from the TERRA Unit (Jean-Louis Doucet, Baudouin Michel and Cédric Vermeulen), who selected this UNESCO Biosphere Reserve, the last remnant of the Congolese Mayombe forest, so admired for its rich biodiversity.

FIND OUT MOR



#### ACTIONS ROOTED IN STUDENT LIFE: CHALLENGES ON A COMMITMENT PLATFORM

The challenges programme aims to help students reduce their individual carbon footprint by proposing a series of concrete actions to change their consumption habits in the areas of food, recycling of objects, waste management, energy consumption, water consumption, plastics, etc. To maximise the impact, the Green Office has put in place a way to follow this programme collectively on a collaborative digital platform.

### 1. Programme Goals

In line with the objectives of the Paris Agreement, the programme aims to reduce the student carbon footprint by approximately 50% by 2030. A progressive annual reduction of 5 to 10% is envisaged (i.e. an annual saving of 500 to 1000 kg eqCO<sub>2</sub> based on the average Belgian carbon footprint being estimated at 11,000 kg eqCO<sub>2</sub> for the individual contribution, with 3000 to 4000 kg to be added for public services).

We are working to ensure that by 2030, all 25,000 students will have made the transition to lowcarbon consumption. A first milestone has been set for the end of this year, with the objective of having the 2,500 students registered on the platform making the transition.

#### 2. Pilot Test

During the autumn, a first pilot phase was organised with the proposal of 10 challenges on a commitment platform. More than 600 students took part in this test. A satisfaction survey revealed the students' interest in the programme and their willingness to make it widely known to the whole community.

#### 3.30 Challenges Programme

In March 2021, during a hackathon, a series of 30 challenges to reduce one's carbon footprint was prepared by the students with the help of a carbon footprint expert (Thomas Wansart, Neosolution).

These challenges were designed with the students' habits in mind. Together, with their new consumption habits, students have been able to achieve a 50% reduction of their individual carbon footprint.

The first challenges were published on the platform in early May. The next challenges will be published in autumn 2021. In June, more than 1300 students were registered on the platform. 4. International Recognition and Prospects

Thanks to Belgian support (selection of the project by the jury of the ARES Sustainable Development Commission and the jury of the King Baudouin Foundation), the Green Office team entered the challenge programme in the "Challenge Campus 2030" competition organised by the United Nations.

Of the 680 projects entered into this competition, the project was selected as one of the 6 finalists. Agorize, world leader in open innovation challenges, the United Nations Regional Information Centre (UNRIC) and the Agence Universitaire de la Francophonie (AUF) organised the final on Friday 11th June 2021. The Green Office project won the AUF prize. As a result, the Green Office team will benefit from four months of coaching in order to develop a toolbox that will allow the replication of the programme within other higher education institutions.

## 5 Teaching and Research Projects

## 5.1 Teaching

### SUSTAINABLE DEVELOPMENT TRAINING AT ULIEGE

Since September 2020, ULiège has organised a training course in sustainable development worth 1 ECTS intended for first-year Bachelor's students, available for all course programmes. This is a new, cross-disciplinary course, run by doctoral students, which raises awareness and trains tomorrow's actors in one of the most important issues of the 21st century. 340 students registered for this first edition.





### WASABI: A TEACHING AND CITIZEN TOOL

On the whole of the 5 hectares of the Gembloux campus, Wasabi offers a way for people, in an educational and civic manner, to familiarise themselves with new forms of urban agriculture: green roofs, rooftop greenhouses, vertical farms, container crops, permaculture, aquaponics, etc. These numerous methods are all alternative laboratories to intensive monoculture, thought out and developed in Gembloux to meet the challenges facing the agriculture industry and urban population of tomorrow.

### A MOOC TO RAISE AWARENESS OF RECYCLING IN THE CONSTRUCTION SECTOR

Recycling became a necessity the moment we realised that we live in a limited world (in terms of energy, natural resources, space, and even, more simply, nature's ability to adapt). Since 2018, the MOOC (Massive Open Online Course) "ConstruiREcycler" has presented key figures, concepts and theories to understand waste management in the construction sector. It is aimed at anyone interested in the recovery of secondary resources in the world of construction, and in particular architects, engineers, chemists and technicians in the fields of building construction and civil engineering.

## 5.2 Research

Scientists from the University of Liège are involved in numerous research projects that respond to the sustainable development objectives put forward by the United Nations. Migration, climate, health, environment, economy, energy, habitat, food... Let's focus on some of the many projects carried out by ULiège researchers.



The PANGAGEN project carried out by ULiège researchers aims to study the adaptation of freshwater fish to changes in their environment due to the increase in the ocean volume in the Mekong Delta (Vietnam). The next steps will be to produce individuals that are more tolerant to the new conditions and to disseminate them to seed producers, on the one hand, and to small-scale producers on the other, in order to enable the latter to cope with the problems associated with climate change.





Questioning regulations and building design with regard to the risks of overheating due to global warming is the aim of the OCCuPANt research project conducted at ULiège. This project aims to help building designers and political decision-makers to develop measures to protect the most fragile and often isolated populations.





The Cyber-Physical Risk of the bulk Electric Energy Supply System (CYPRESS) project aims to develop intelligent decision support software solutions for renewable energy network operators. This project will contribute to supply security via electricity transmission networks.



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Cancer patients have to deal with the physiological and psychological side effects of diagnosis and treatment, such as surgery, chemotherapy or radiotherapy. In order to help them overcome these side effects, ULiège has set up the project "Sport after Cancer - Sporty Citizen, Acting for my Health" (*Sport après cancer - Citoyen sportif, j'agis pour ma santé*) in collaboration with local authorities.



Improving the health of animals, reducing their environmental impact, increasing biodiversity - "The BoS" project aims to describe and analyse how societal values are applied to the bodies of cattle. How are values such as health, biodiversity and the environment integrated into cattle selection and breeding?





Optimising cloud nets inspired by nature to provide water to people in arid areas. Thanks to biomimicry, researchers at ULiège have developed nets that capture the humidity in the air, direct the movement of drops and allow them to be collected.





As part of the GO Transition.s project, the Arlon Environment campus of ULiège is being transformed for its 50th anniversary into an open laboratory for the ecological transition of territories. This project will enable us to experiment with ways of responding locally to global ecological challenges, at a time when the climate emergency requires a real acceleration of the ecological transition.

EN SAVOIR PLUS



As a public-private partnership for the sustainable management of Central African forests, the P3FAC project focuses on understanding the dynamics of tree populations s with a view to improving forestry practices. The aim is also to integrate local populations and forestry administrations into this sustainable approach.





Researchers at ULiège have set up a project to identify trace chemicals in samples from volunteers and analyse how pollutants are measured in local human biomonitoring (HBM) projects. Then, the project intends to see how these measurements are translated into evidence to inform policy makers and/or citizens on future courses of action.



What role does food play in creating public spaces that provide opportunities for encounters and inclusion? This is the main focus of the international project Food2Gather which questions the relationship between migration and food. ULiège is participating in this project, paying particular attention to the case of children.





The international research project ExCoNat aims to explore and document the experience of connection and disconnection with nature and animals on the basis of micro phenomenological interviews. The aim is also to capture the educational potential of the experience of connection to nature and other living things.



Sarcopenia, the loss of muscle mass and strength in the elderly, increases the risk of falls and therefore of hospitalisation and even premature death. In order to better understand this problem, ULiège is developing a project to evaluate the preventive factors of the consequences of sarcopenia in order to improve the quality of life of those concerned.





As part of a cooperation project in Cameroon, ULiège is participating in an initiative to develop local resources to create new competitive, accessible and eco-responsible construction materials. The project also aims to develop a technology transfer centre.







The WALAC project, set up in partnership with stakeholders in the Beninese milk sector, aims to improve the traditional production and conservation processes for curdled milk and Wagashi Gassiré in order to provide consumers with a quality product. This improvement will prevent waste (through spoiled cheese) and increase the income of women, the primary producers of these cheeses.

FIND OUT MORE



Liège is actively involved in a project which aims to improve the quality of mud brick housing by working on both the materials and the architecture. A double approach, which is in line with global development goals and offers a comprehensive response to the construction problem and aims to improve the housing conditions of local populations through more comfortable and sustainable housing.





The Smartbiocontrol project, in which ULiège is participating, is interested in the discovery of new biomolecules capable of effectively combating numerous recurrent crop diseases in a way that respects nature. The aim is to develop alternatives to traditional pesticides, with a sustainable agriculture approach.







ULiège is developing a project to evaluate the environmental impact of various Walloon cattle farms on water quality and biodiversity in Wallonia. Once the environmental diagnosis has been carried out, a personalised follow-up is offered to farmers to advise them on the implementation of environmentally friendly practices.



A project to analyse parity, and more specifically the presence of women, in the field of the performing arts (excluding classical and non-classical music) subsidised by the Wallonia-Brussels Federation. The project uses an approach that emphasises the creativity of the actors, i.e. the way in which they appropriate a general standard by adapting it to their art and using it in their context.





The Climate-risk Pricing project aims to assess the financial risks associated with climate change. It focuses on the estimation of an environmental factor impacting the price of corporate bonds and the evaluation of a physical climate risk premium.





ULiège has just launched a research project on the use of a food plant - Neem - to improve the health of guinea pigs in Cameroon. This study aims to improve the techniques of mini-farming as a means of combating food insecurity, as well as to promote local trade.



The BruTryp project aims to set up a platform to support training and awareness-raising initiatives, as well as diagnosis and development of a control strategy for Brucellosis and Trypasonomiasis in Ecuador. The platform will help to better inform policy makers so that they can make informed decisions based on reliable scientific information.



Researchers at ULiège have launched a project exploring the possibilities of using  $CO_2$  under supercritical conditions as an alternative to the use of organic solvents for the extraction, analysis, formulation and manufacture of new drugs.

MORE RESEARCH PROJECTS AT WWW.DURABLE.ULIEGE.BE

# 62019 Carbon Evaluation

In 2021, ULiège carried out its carbon assessment for the reference year 2019. It is an essential tool for any ambitious environmental policy, as it enables the main greenhouse gas emission items to be identified and their evolution to be evaluated. Updated on a regular basis, it will allow the University to objectively assess the trajectory towards its emission reduction objectives.

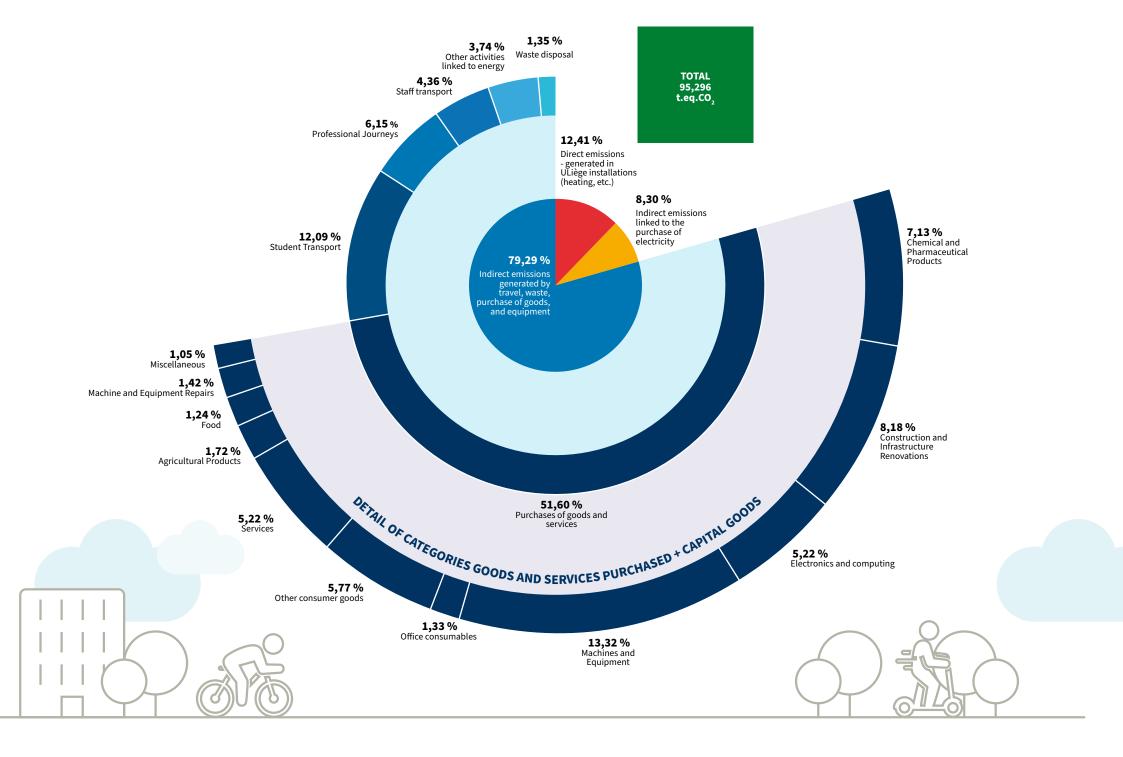
The evaluation for 2019 shows the overall emissions of ULiège to be at 95,000 t.eq CO<sub>2</sub>.

The combustion of fossil fuels in ULiège's facilities and vehicles corresponds to 12.4% of this total (scope 1), while emissions linked to the purchase and consumption of electricity represent 8.3% (scope 2).

Indirect emissions (scope 3) therefore correspond to 79.3% of the emissions generated by ULiège, including the purchase of goods and services (37.2% of the total), the purchase of capital goods (14.4%), daily travel by students (12.1%) and employees (4.4%), business travel (6.1%) and waste (1.4%). These figures are estimates based on hypotheses: the objective is to obtain orders of magnitude making it possible to identify the main emission areas where the Institution can act in order to reduce its environmental impact.

Several working groups will analyse how to reduce emissions sector by sector, including the purchase of certain goods and services (e.g. IT equipment), employee and student travel, business trips by plane, waste, and the energy consumption within buildings. Some sectors are already covered by institutional strategies that can be adapted, such as the infrastructure plan. In 2023, the University's carbon footprint will be updated for the reference year 2022. This new diagnosis will make it possible to assess the evolution of the Institution's emissions and to integrate or refine certain emission areas on the basis of the most recent data.





## **7** 2020-2021 Sustainability Dashboard

ULiège has set up a dashboard built around the 17 SDGs and based on the available indicators. The objective of this dashboard is to draw up an inventory of progress in the field of sustainable development. This is the first step in a more comprehensive monitoring exercise, where targets for certain objectives can be identified.

	Indicator	2018-2019 2018 Data	2019-2020 2019 Data	2020-2021 2020Data
1 poverty	Number of students who receive a study grant or have reduced study fees	3,543	4,243	5,054
<u>Ň</u> ŧŧŧŤ	Share of budget allocated to integration measures	303	326	298
	Number of registered students from developing countries	2,439	2,635	2,612
3 GOOD HEALTH AND WELL-BEING	Number of students that receive psycho-social assistance	89	112	ND
-₩•	Number of students who graduated with a Master's degree or higher qualification in the medical domain	803	800	ND
4 EDUCATION	Number of students in continued education	1,064	1,215	1,246
	Number of students who were admitted onto their study programme thanks to APEL	175	136	154
	Percentage of students who completed their Bachelor's and Master's degree "in 5 years"	19,87 %	19,60 %	ND
	Number of students on bridge programmes	1,768	1,981	2,149
	Number of courses with the words "durable/sustainable" in their title	78	85	80
	Number of students who followed one of these courses	1,109	1,333	1,424

	Indicator	2018-2019 2018 Data	2019-2020 2019 Data	2020-2021 2020Data
	Proportion of women registered for the first time for a doctoral degree	46 %	49 %	44 %
	Proportion of women promoted to "professor" (professeur)	ND	30 %	ND
	Proportion of women promoted to "full professor" (professeur ordinaire)	ND	11 %	ND
	Proportion of women in top management positions: Board of Directors	ND	ND	23 %
	Proportion of women in top management positions: Rectoral Team	ND	ND	20 %
	Proportion of women in top management positions: Deans	ND	ND	33 %
6 CLEAN WATER AND SANITATION	Network water consumption / person	7.36	8.75	6.09
Ŷ	Groundwater water consumption / person	77,833	83,452	ND
	Rainwater water consumption / person	ND	342	344
	Mixed industrial and domestic wastewater discharge (m <sup>3</sup> / year)	15.0972	13.9160	ND
7 AFFORDABLE AND CLEAN ENERGY	Gross surface area (m <sup>2</sup> ) – constructed	574,810	570,300	586,230
-œ-	Electricity consumption / m <sup>2</sup>	77	76	69
	Heat consumption / m <sup>2</sup>	135	130	122
	Water consumption / m <sup>2</sup>	410	511	355
	Emissions of $CO_2$ / m <sup>2</sup> due to electricity consumption	28	27	24
	Emissions of $CO_2$ / m <sup>2</sup> due to heat consumption	21	19	16
	Percentage of self-generated electricity from renewable sources	20 %	23 %	ND
	Percentage of self-generated heat from renewable sources	41 %	48 %	ND
8 DECENT WORK AND ECONOMIC GROWTH	Master's graduates in a Master's level job, 1 year after starting their job search	67 %	63 %	64 %
Ĩ	Ratio of staff on fixed term (CDD)/permanent (CDI) contracts	46 %	47 %	47 %





	Indicator	2018-2019 2018 Data	2019-2020 2019 Data	2020-2021 2020Data
9 NOUSTRY, NORMATION AND INFRASTRUCTURE	Cumulative number of spin-offs created	144	146	146
	Cumulative number of patents	1,066	1,097	1,130
	Cumulative number of signed technology transfers (licences)	433	495	500
	Five-year average property investment	16,799	20,732	22,773
	Industry revenue (from third-parties)	56,947	50,549	78,474
	Number of researchers	2,198.1	2,769.8	2,846.9
	Share of budget dedicated to research	60 %	59 %	60 %
10 REDUCED	Number of students with a disability who receive support from ULiège support services	240	267	270
×≣≻	Number of students from developing countries who receive a student grant	588	617	439
	Number of computer rooms	52	52	49
	Number of computers available to students	1,010	1,096	1,034
11 SUSTAINABLE CITIES AND COMMONITIES	Number of MOOCs organised by ULiège	7	20	21
A∎₫⊞	Modal share of car journeys (Sart Tilman)	44,1%	44,1%	44,1%
	Modal share of carpooling journeys (Sart Tilman)	16,2%	16,2%	16,2%
	Modal share of public transport journeys (Sart Tilman)	36,3%	36,3%	36,3%
	Modal share of bike journeys (Sart Tilman)	1,8%	1,8%	1,8%
	Number of students living at the family home within the reference zone	17,980	18,761	19,728
	Number of students living in student accommodation within the reference zone	4,567	4,536	4,383
12 ESPORES	Tonnes of residual waste (excl. GxABT and Arlon)	524	576	363
	Tonnes of cardboard/paper waste (excl. GxABT and Arlon)	206	270	251
	Tonnes of wood waste (excl. GxABT and Arlon)	13	11	9
	Tonnes of inert and construction waste (excl. GxABT and Arlon)	31	11	16
	Number of recycling bags (PMC) distributed (excl. GxABT and Arlon)	3,513	4,198	2,441







### INSTITUTIONAL SUSTAINABLE DEVELOPMENT UNIT

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### WWW.DURABLE.ULIEGE.BE