

SUSTAINABILITY REPORT

STUDENTEN ORGANISATIE
GRONINGEN



Faction 22' -23'

Laura Keijzer

Hanna van Dalssen

Ruben Wagenvoort

Wout Trox

Mariia Abdurashitova

Naomi Scholte

**RECOMMENDATIONS FOR
A SUSTAINABLE
UNIVERSITY
OF GRONINGEN**



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Introduction

The world is changing, and every day humankind is confronted with new challenges. Can our institutions be sustainable in the current societal framework? SOG encourages the University of Groningen to be on the forefront of creating a durable and sustainable structure in which the people of our university can grow and flourish. The student population holds a generation that is more motivated than ever to work on issues like climate change and the sustainable treatment of the planet. We, as SOG, want to offer a student's perspective on sustainability to the university. In order to gather input from students, SOG held a brainstorming session with students from a wide range of academic backgrounds and interests.¹ Besides that, we approached people that are experts in the field of sustainability. This happened all the while continuously reaching out to student organisations with the question as to how they and the university could become more sustainable. All their input resulted in the composition of this report. The input we received from students entailed the following points; Our university needs to work on innovative short-term solutions and inform students about their long-term vision of sustainability, as our sounding board believes the energy crisis we are facing now is only the tip of the iceberg. The student population of the University is more than willing to do their part in the pathway towards a more sustainable University. Students need a solid perspective on the process and want to know how they can contribute to overall sustainable development. Over the years, SOG has stressed the importance of sustainability and handling the issues resulting from a lacking adaptation strategy. This is a tradition that will be carried on throughout the course of the organisation's existence. With this report, SOG presents a range of possibilities and solutions that will help the sustainability of the University to new levels. By doing this, we want to inspire change within the university and mentioned ideas are to be broadly interpreted as this will leave a lot of room for diverse implementation. Costs will vary case to case, consequently no clear calculations could be made to cover the entire University. The report is to be the foundation for further sustainable development in all departments of the university. All organs of the University will be able to consult this report to reflect a student's perspective within their policies.

¹ One brainstorming session with six students from different backgrounds. Meetings with all study associations. Meetings with several experts. See "Special thanks to".

Problem Statement

Sustainability is no longer an option; it is a necessity. The rising gas prices illustrate a problem that will continue to be present throughout all layers of society. Over the upcoming years, the urgency of transitioning to a more sustainable way of living will become more pressing, as the direct consequences of climate change and the overall environmental exhaustion of the planet will become more evident. Governmental parties will have to force external parties to transition towards more sustainable practices through legislation. Universities are at the forefront of sustainable development and have access to the newest technologies, best thinkers and governmental funding. The academic community should take on the challenge of expanding awareness and engagement regarding sustainable progress. At the moment, the University faces unexpected financial challenges regarding the rising gas prices. SOG urges the university to become conscious of the fact that being dependent on fossil fuels is the Achilles' heel of the stability of the University, in the present day, but in the future as well. Investing in reliable and sustainable energy will come with great benefits, one of them becoming more independent of the fluctuations of international politics and future national and European regulations (European Commission, 2020). By the time it is 2050, almost all energy used in the Netherlands must come from a sustainable source. By working on this transition now, the University will have less problems to deal with when the year 2050 is approaching (Rijksoverheid, n.d). In this report, the broad understanding and implementation of sustainability will be discussed, followed by recommendations for the university from a student perspective.

Students

Student Organisations

Student organisations are actively working to ensure a sustainable environment. Every academic year boards take on the mission to make their organisation more sustainable, most of them get evaluated by the green office and end up with a label that shows their sustainable achievements and progress. We encourage the University to support the student organisations in their initiatives, together with stimulating them to take further steps.

Policy from the University (top down)

Student organisations are taking action themselves, but we have noticed that for some student boards, it is difficult to take their associations' members along with the sustainability ambitions from the policy plan of the board. General policy or recommendations could help create more support and show the necessity of taking action under study associations. These guidelines could go into, for example, paper usage or sustainable catering. Another option would be to create a handbook for sustainability like the University of Utrecht made. It includes detailed examples of actions student organisations can take in various forms, including committees, trips and parties. (Utrecht University [UU] et al., 2021). This makes the handbook a great source of sustainable steps associations can take. The University of Groningen could create such a handbook for the organisations in Groningen to stimulate sustainability.

Sharing Best Practices

Currently, the Green Office hands out labels to student organisations based on a point system. This is a great system to encourage student boards to think about sustainability and what they can do in their association. Many student organisations make use of this. However, we are missing a 'best practices' aspect, which can inspire other associations to adopt measures. There is a collaboration between a few study associations with a document like this, but it may help to organise this centrally. Student organisations can deliver best practices to the Green Office for example, who organise it in a document. (Green Office, n.d.)

Including Student Participation

We encourage the university to include more student participation in the turn to a sustainable university. Firstly, a UG-only competition to encourage students to think about the sustainability question creates more awareness among students and challenges them to actively contribute to sustainable changes in the UG. Secondly, ENLIGHT has a similar project, called "Global Dialogues" in which students are challenged to hand in their initiatives on the topic of sustainability and engage in discussions with peers to share their best practices. Investing in projects like this and actively promoting them across the UG creates more awareness and sparks new ideas about sustainability that can be implemented in a later stage. Finally, the University of Amsterdam has a 'creating a course challenge', which does not only increase the quality of education as it gives students ownership of their learning process, it also increases inter-faculty collaboration and stimulates students to think about sustainability (Universiteit van Amsterdam, 2022).

Long Term Action Plan

To adequately tackle the points of improvement regarding sustainability SOG has made the distinction between long-term and short-term solutions. This chapter will cover the long-term solutions and will guide you through initiatives that will affect the university in the long run. As mentioned before, it is essential to invest in sustainable development because of the future regulations and conditions regarding sustainability.

Sustainable healthcare provider

A healthcare provider is a company or organisation that provides health insurance coverage to individuals. The role of a healthcare insurer is to manage the financial risk associated with providing health insurance coverage to its members. They do this by collecting premiums from members, negotiating prices with healthcare providers, and paying for the medical care and treatments their members receive. They also review claims and determine the amount of payment for each service based on the terms of the health insurance plan. Premiums from members are invested by the insurer to make money with the investment (Ross, 2021). The insurance industry is Europe's largest institutional investor (Insurance Europe, n.d.), and has therefore quite some impact they can make. Investing in Green initiatives stimulates companies to reduce their carbon emissions by raising the cost of capital of the most carbon-intensive companies (De Angelis et al., 2022). Green investing helps make the switch to a sustainable society.

The University of Groningen now has a deal with Menzis, a health insurer. Staff working at the university have the privilege of having discounts on insurance options. Even though Menzis is the main health insurance provider right now, there are more sustainable healthcare providers on the market. The UG can explore other options, such as a.s.r., the Netherlands' most sustainable option (Eerlijke Verzekeringswijzer, 2022). With an investment portfolio of 3,529 billion euros (end 2021, (a.s.r. Nederland N.V., 2022)), a.s.r. creates a significant impact by having the majority of the portfolio invested in sustainable projects and companies by helping stimulating companies to reduce their carbon emissions (De Angelis et al., 2022). One of the main goals of a.s.r. is to reduce the amount of carbon emissions their portfolio generates by 65% in 2030 (a.s.r.,n.d.).

Menzis had an investment portfolio of 1,692 billion euros (end 2021, (Menzis Coöperatie U.A., 2022)) and could also significantly impact sustainability, but it has yet to do so. By choosing a.s.r. (or another more sustainable health insurance provider) over Menzis, the University could be part of the enormous sustainable impact a.s.r. now has. This way, money will be invested more sustainably, and the University can make a more substantial impact. One of the ways the university can make the biggest impact on sustainability is where they put their money. Big sums can make a significant difference, and if these reserves are being managed in a way that will further sustainable development, even though the university is not directly responsible, the financial means of the university can change a lot for research and development.

In conclusion, healthcare insurance companies have big investment portfolios. One healthcare insurance provider invests more sustainably than the other. The university should switch to a more sustainable healthcare insurer to indirectly stimulate companies to reduce their carbon footprint.

Share in a public solar panel / windmill project. (Energy Coalition)

To be more independent of the fluctuations in national and international politics, the University has multiple options they can explore. As technologies progress, the instalment of windmill parks and solar fields gets cheaper by the day (Van Beusekom, 2020). The land above Zernike Campus lends itself to these projects. Investing in renewable energy projects such as wind parks can be attractive to our University for several reasons:

1. It aligns with their sustainability goals and commitments, as renewable energy can help reduce greenhouse gas emissions and mitigate climate change.
2. Investing in wind parks can provide a long-term, stable source of income for the University, providing energy and electricity and supporting research, education, and other initiatives. The surplus energy can be sold to external parties.
3. It can demonstrate the University's leadership and commitment to renewable energy, which can enhance its reputation and attract funding for research.

In the long term, the University of Groningen could develop a park to provide Zernike campus with sustainable energy. This could be in partnership with the other educational institutions in the city in the shape of an energy coalition.

Facilitate charging stations

Charging stations recharge electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs). Staff and students can recharge their EVs, PHEVs, and bikes by facilitating charging stations on campus. At the end of November 2022, 5,6% of all cars were electric (EV Monitor Team at Netherlands Enterprise Agency, 2022). More than half of the bikes sold in 2021 were electric bikes ((E-bike domineert fietsverkopen in 2021, n.d.)). Those numbers mirror a cultural change in our society. The University can encourage these positive trends by making it easier for staff and students to use their electric vehicles and enable them to charge their devices. It is necessary to look at options to enhance the flow of using the charging stations to make it possible for as many people as possible to use the stations. In conclusion, the University should facilitate charging stations for students and staff to recharge their transportation devices. With this, the university encourages positive cultural change .

Short Term Action Plan

Besides long-term structural change, a lot of things can be done in the near future. Some of these initiatives are high in impact and some will contribute to the overall change regarding sustainability. Most of these initiatives will directly involve energy and could change the university's energy expenditure. Because of that SOG urges the University to look into these proposals with a more assertive approach.

Thermographic Inspections

A thermographic inspection, also known as infrared inspection, is a testing technique used to detect and analyse temperature differences of surfaces (Thermographic Inspections, n.d.). One of the practices experts adopt to support building energy efficiency initiatives is executing thermographic inspections (Plowright & UBC Sustainability Scholars program, 2016). By scanning buildings, warmth leaks can be detected and investigated. As stated in this report, adequate solutions can be implemented by finding the most significant thermal weaknesses within the buildings. By tailoring solutions to specific situations, the costs of re-doing a whole building will be minimalised.

An example of this practice is a project that was carried out by one of the contributors to this paper, Martien Visser, who now works as a lector for EnTranCe. During his career, he was charged with the re-doing and renovation of a swimming pool. The energy expenditure of this building was at an all-time high. Cold drafts bothered the visitors within the building, and without keeping the heating turned all the way up, the building became too cold to function fully. A team was assembled, armed with a warmth detector, and started to check the whole building. The two biggest problems came to light, the waterslide was losing the most warmth, as it was not isolated and because of that, warmth seeped out, and cold seeped in. This, together with an old ventilation structure at the top of the overarching dome of the building, was the cause of the cold air circulation. The water slide was isolated, and the electricity powering the not functioning ventilation system was cut off. Since then, the energy expenditure of the swimming pool has decreased tremendously.

Currently, many old buildings of the university have cracks and openings through which air and warmth leak into spaces where it is unwanted. We should investigate with an infrared camera to know where all these cracks and openings are. Either way, within certain buildings, a constant cold air flow circulates in the halls, this is because there are cracks and openings in the window frames. SOG advises the University to look into the possibilities of sealing these cracks or replacing the windows, even though the buildings are old. It is of the essence that because the buildings are old, the cracks that can be easily fixed are sealed, as these buildings are the ones that have the biggest chunk of energy expenditure within the whole real-estate portfolio of the University.

Executing thermographic inspections can be a good way for students interested in sustainability to gain practical experience. These projects will be an excellent addition to students' heating and building research. Concluding, we advise the university to execute thermographic inspections, if possible, by students. With these inspections, we discover the weak spots of buildings which we can solve with the solutions stated in this report.

Radiator Foil

Radiator Foil is a foil which anyone can place behind radiators. The foil will deflect the heat behind the radiators and send it into the room instead of into the walls or towards the windows. Because of this, less energy is needed to heat a space (TONZON, n.d.). According to Milieucentraal, per square metre of foil, you can save ten cubic metres of gas annually (Milieu Centraal, n.d.-a).

The university can take a huge step in reducing gas expenses by putting radiator foil behind radiators. The radiator foil stops unnecessary heat loss from the radiator. As a result, the radiator can use its heat more efficiently to heat the room and will prevent heat from escaping to places it does not belong. The Faculty of Science and Engineering already uses this solution (Van Geldorp, 2023). We advise the university to look into placing radiator foil behind radiators in buildings of other faculties.

Weather strips

Weather strips or weather seals are flexible strips that are installed around doors, windows, hatches and other openings of a building to create a weather-resistant seal (U.S department of Energy, n.d.). Reducing the amount of air leaking in and out of a building is a cost-effective way to reduce heating and cooling costs, improve sustainability, increase comfort and create a healthier indoor environment. According to Milieucentraal, placing weather strips in an average semi-detached house can save 70 cubic metres of gas annually (Milieu Centraal, n.d.-b). SOG urges the university to look into placing weather strips in older buildings like Nijenborgh 4, the Harmony complex and Munnekeholm 10. Recently, the municipality launched a campaign "Duurzaam Groningen", that consists of different initiatives to make Groningen a more sustainable place. One of the components of this campaign is making student homes more energy efficient by providing weather strips for free (Duurzaam Groningen, n.d.). As the capacity is limited, the university could also play a part in this. The energy efficiency of these buildings could increase tremendously, together with an improvement in the comfort level for people present in these buildings.

Secondary Glazing

Secondary glazing is putting a second window in front of an already existing window. The air space created between the two windows provides insulation and reduces heat loss or gain, improving the energy efficiency of a building. The extra layer of glass can also be tinted or coated with a low-emissivity coating to improve thermal control. Secondary glazing is the only way to improve the thermal performance of historical buildings due to restrictions imposed on them (*Bronze Casements Ltd*, n.d.). The UG owns a number of monumental buildings, which prevents them from replacing certain components that are not up to the necessary sustainable standards. Secondary glazing of the windows of these monumental buildings is a necessary solution to improve thermal performance and improve the well-being of students and staff. Hence, the University should apply secondary glazing to all its monumental windows.

Motion Sensors

Motion sensors are electronic devices that detect movement in their environment and trigger a response. If used as a light switch, the motion sensor will trigger the switch to turn the light on if it detects motion and will turn it off when it does not detect motion for a while (Energy.gov, n.d.). The UG makes use of motion sensors in its new buildings that are used to control the light and save electricity in case there is nobody there. Motion sensors turn lights off when light is not needed and can save electricity. Hence we advise the university to also place motion sensors in older buildings. However, one of the main points of feedback SOG received about motion sensors is that there should still always be a light switch present. The norm should be the sensor, but sometimes this does not have the desired effect for the people making use of a space.

Lightstaff

One of the most received feedback points SOG received from the student population regarding the sustainability of the university is the inefficiency of the light usage of the university buildings. Late at night, entire sections of buildings are still illuminated by lamps throughout the rooms of the story where perhaps, only one person is working. There are multiple solutions to this problem, namely making the powering of the lights more decentrally organised, for instance with motion detectors in combination with sectioned off light switches. This can be in collaboration with the facility management of faculties, who could be in charge of making sure that the lights are on efficiently and only when needed.

Unplug lights

At the Faculty of Science and Engineering, some co-workers have got the freedom to de-install the light sources they do not feel are necessary for workspaces in buildings. If there is no need for a very bright room, the unplugging of lightbulbs is a sufficient solution. If there is a big amount of light sources in a single small room, the impact of the total illumination will be minimal. The university could communicate this practice with its technical staff and make it a more frequent practice by doing so.

Sustainable Culture within the University of Groningen

It is of uttermost importance that students and staff are surrounded by a sustainable culture within the University of Groningen. By this, SOG points towards an environment that is both aware and passionate about making this institution a more sustainable place. This is already done by the communication strategy of the UG regarding, for example, the lowering of the thermostat and other energy-saving measures that students and staff can work on themselves. We find it important to expand upon these measures, to facilitate a culture change when it comes to sustainability. Most of the measures we propose are centred around awareness, as this is the first step towards a sustainable campus. The UNEP has developed a 4-step framework towards a sustainable university, in which the importance of engagement with students and staff is highlighted (Education Race to Zero for Universities and Colleges, n.d.). This is why we propose the following measures:

Infographics saving electricity

Since the energy crisis, more and more faculties provide students and staff with the facts on how much energy the faculty has saved. These facts are shown as infographics on screens in the faculty. We believe that sharing this data is a great development, it stimulates switching to a more sustainable society. We propose that the University of Groningen will show this data in infographics permanently to keep making use of the momentum we now have.

Bring your own mug

We advise the university to reward students for bringing their own mugs. The university could give students who bring their mugs a discount on their drinks. The programming of the coffee machines needs to be altered in order to make this possible in non-people-handled catering. This way, we reward this positive behaviour and finally stimulate a culture change the university is already promoting for a long time. Starbucks already started with this system in the 1980s (Lucas, 2022)!

Increase number of water taps

Students who bring their own bottles or mugs should also be able to drink water easily. Widely placed water taps around the campus will promote the healthy behaviour of drinking water. Therefore, we propose to increase the number of water taps, where students can drink water and clean their mugs.

Using less paper

We advise the university to encourage students and staff to digitise their thesis projects and if possible, make their exams digitally. This way, the university creates more awareness and less waste. Currently, students are sometimes forced by their teachers to print their literature, causing a lot of waste of goods for a document that will only be used temporarily. The responsibility to use less paper lies with all organs of the university. Therefore we advise the university to create a university-wide policy with clear guidelines for staff, students and student organisations. Faculties will be able to make the best estimate about the consumed paper, and consequently will be able to make adequate regulations when it comes to paper usage in programmes.

Survey desired temperature

We recommend the university to conduct a survey to investigate the desired temperature within the university buildings. This should be a survey that includes gender, as there are differences between the two genders when it comes to experienced temperature, to investigate the desired amount of heating. This is to make sure that every student is fully represented in the outcome of the study, as the average might not cover the needs of the majority of the student population. The conclusion can be used to, for instance, permanently lower the temperature to 19 degrees Celsius.

Sustainable catering

We recommend the university to widen its focus on sustainable catering. Firstly, the UG must show its students the importance of eating locally sourced food, that is in big parts plant-based. This also creates awareness and can inspire students to implement another diet at home. Secondly, for creating awareness, it is important to not advertise meat-based meals, as we saw in the Academy Building for several weeks at the beginning of the year. Thirdly, a short-term solution could be to label food based on their emissions, which allows students and staff to consciously decide on what they want to eat. The university of Wageningen has already implemented a similar system (Boone, 2023). Finally, at the moment, the university has no system in place to get rid of the food that can not be sold anymore. Throughout the city, a lot of restaurants, cafes and hotels make use of the service Too Good To Go, which lets them sell the excess products after closing time to people for a reduced price. The bigger catering facilities of the University will be able to do this when they have, for instance, excess lunches, or bread that will expire or that is prepared already. This reduces the waste output of the university and gives students and other people in Groningen the opportunity to purchase good quality food.

Surplus Platform

The University of Yale has developed a small-scale platform to combat waste and encourage recycling, a surplus platform (*Eli Surplus Exchange | It's Your Yale*, n.d.). It is targeted towards education materials that one faculty or program might no longer have use for, but another faculty might be in need of those materials. Examples that are posted on the website are conference tables, chairs, but also lab materials such as microscopes. This platform is a tab on their website and employees can log in, and post pictures of the material along with a description and purchase items posted. The University could purchase or design such a platform to combat waste and encourage recycling.

Engage with the municipality to find new ways to recycle waste

We advise the university to engage with the municipality to find new ways to recycle waste. During the upcoming years, it will become illegal to give out disposable plastic cups with beverages, this will be a huge problem for the student organisations in the city and the events that will be hosted in Groningen. From 2024 onwards, the distribution of disposable cups will be fully illegal and every party must offer cups that can be recycled or reused instead (Kamer van Koophandel, 2021). The University has the means to facilitate research as to what will be the best alternative for these cups. SOG advises taking this opportunity and making it a research project for students to take part in to find solutions to this problem together with the organisations in the city. In the UG, researchers are working on cutting-edge technology to recycle tires and other plastic materials, which we applaud. We hope that these initiatives can, in collaboration with the municipality, be used to find solutions to local problems.

Incentives system

The University of Berkeley has started an initiative to make staff and students more aware of their energy consumption. As the UG does not have on-campus living at this moment, this initiative is mainly towards staff. The idea is simple: Berkeley measured a baseline of energy consumption, based on the fact that operating units that consume less energy are financially rewarded (*myPower | Sustainability & Carbon Solutions, n.d.*). If this incentive system is applied to the UG, it would give faculties the incentive to take measures that are appropriate for their specific buildings, while at the same time motivating them to save energy. Because energy usage is public knowledge, staff can use the feedback from the data to take further action.

Sustainable Development Goals

We recommend the university to draw more attention to the Sustainable Development Goals from the United Nations. These goals set out the course for global sustainable development in several fields, such as environmental sciences, economics or spatial sciences. Even though the SDG's face criticism from time to time they create a clear framework in which people that are motivated to make the world more sustainable can work. Several universities, for instance the Vrije Universiteit, have implemented the SDGs into their overview of courses and programmes, in order to enable students to filter courses based on the relevant SDGs. This increases awareness but also gives the UG the opportunity to review their education and see where sustainability has not been implemented into their curriculum (Universiteit van Amsterdam, 2022). At the moment, the bachelor programme Global Responsibility and Leadership makes use of the SDGs in its curriculum in order to make students more aware of the global challenges they face. By using the SDG's in courses, Ocasys and course guides, the University will be able to draw the attention of students to issues concerning sustainability they might face in the future in regard to what they are studying. It gives students more perspectives to look at certain cases, resulting in multidisciplinary schooling and research.

Healthy environment for students and staff

The University of Groningen needs a breath of fresh air, and by this SOG means more greenery. An environment that adds nature to the lives of staff and students will improve the atmosphere of the university and has a positive effect on people's health (Aydogan & Cerone, 2021). The buildings owned by the university are often focused on efficiency and practicality, which results in a bleak exterior. Currently, the overall décor of the university buildings lacks the presence of plants. The Green Office has undertaken projects to increase this number, by lending out plants for the offices of staff. This project ended because of practical implications and with that the touch of green that could be found across the university. The early ending of this project should not mean the cancellation of the progress that has been made. In this chapter, SOG will make suggestions about making the university an environment with more nature present, to promote mental and physical health improvement among the people of the university.

Greener Interior

More plants in educational areas

The benefits of having a teaching environment with plants have been shown in multiple scientific studies. Plants are known to have a positive influence on the stress levels of students and their productivity. The most important factors in promoting a good learning and teaching environment are light, acoustics, ventilation and ergonomics of the classroom. Windows with natural light are associated with a comfortable learning experience and rooms without are often related to “building sickness”. Students and staff have a preference for classrooms with plants in them, especially when these rooms are naturally darker and denser. The ratings courses receive are partly decided by the teaching environment; therefore, it is of paramount importance to provide an advanced space for good education to be delivered. Research has shown that students feel more comfortable and stimulated in social interaction and spend more time on campus when natural elements are implemented in the interior of the university. SOG recommends placing more plants in classroom settings, lecture halls and offices, to increase overall satisfaction and attitude. This is of most importance in rooms with less interaction with the outside environment (Doxey et al, 2009).

Green Workplace

Another direct suggestion would be to place plants at the desks and workspaces of the University Staff. This will enhance positive emotions and concentration. The managing facilities of the university could be the party responsible for the upkeep of the plants. The plants should be selected on their longevity and ability to flourish in the condition they will be positioned in (Bringslimark et al, 2007). If centrally organised, this will add a huge chunk to the well-being of staff whilst it can be implemented rapidly.

Greener Exterior

University buildings should and will always be practical, however, practicality sometimes takes away the depth and opportunities that real estate has to offer. The Zernike and city campus of the University of Groningen are mostly made up of bricks. Science has proven that adding some nature to the surroundings of the university will do everyone involved in it some good. Being around nature promotes psychological and physical well-being. According to the Dutch Rijksinstituut voor Volksgezondheid en Milieu (n.d), a green environment has the following physical health benefits:

- Reduced rate of dangerous heart and vascular diseases
- Reduced rate of diabetes type II
- Reduced overall mortality
- Reduced allergy complaints
- Reduced chance of Infectious diseases
- Improvement of the immune system
- Improved respiratory abilities

Besides physical effects, the mental benefits of nature should be accounted for as well:

- General improvement in wellbeing
- Improved quality of sleep
 - Improved mood
 - Heightened relaxation
 - Reduced chance of depression
 - Reduced rate of stress
 - Reduced anxiety
- Better cognitive health
 - Improved focus
 - Improved memory
 - Improved academic performance

The famous Noorderplantsoen in Groningen is known to draw students to its grounds throughout all seasons, and the inner botanical garden of the faculty of GMW is used a lot by the university's population. Adding more green to the university's grounds should be one of the real estate goals for the upcoming years. An example of areas that could use some plants and natural areas is the Harmony complex. Its interior and exterior lack connection to natural elements and are mostly made up of artificial building materials. Adding more green attributes to Harmony square will give students and staff a warm welcome to the grounds and will offer a space to settle down when the weather allows it. The spatial planning of areas like this should be according to the newest scientific findings regarding human well-being and their environment (Rijksinstituut voor Volksgezondheid en Milieu, 2019). This will serve as an example for other organisations as well. One of the institutions the university of Groningen can look towards for inspiration is the University of Amsterdam. In their science park, the university has added several green spaces that have free access for everyone (Gelder, 2019). The sustainable development of the campus must be overseen and progressed by the sustainability officer that will look upon all the real estate plans of the university and give tailored feedback to all of them.

Digital Energy Saving

Digital Cleanup

The University of Groningen can not only be more sustainable by touching things in hand's reach but also by looking over the virtual border. The Google online storage of the university is now about 800 Terabytes. The university can save energy over the border by cleaning up more data. Researchers can remove data that is redundant, for instance double copies. The University may have other data which is no longer needed, such as deducted courses which we can delete.

Digital Cleanup Week

The university has a yearly digital cleanup week in May, organised by the CIT and Green Office (*Digital CleanUp Week 2022 | 9-13 May 2022*). The Green Office has also created a handy guide on how to clean digitally (Centre for Information Technology [CIT] & Green Office, n.d.). This is great work, but it could be better promoted such that more students participate. By making this a big event annually, we change the behaviour of students and staff. In the end, we want a culture change and not something temporary.

Cloud Traffic

The amount of energy we use for cloud traffic is incredible. As our Green Office already said on the website: "All the cloud traffic at the UG combined costs over 11 million kWh of electricity per year: enough to provide for 4500 households. Since the University is a knowledge institution, it should take the leading role in reducing this."(*Digital CleanUp Week 2022 | 9-13 May 2022*) We advise the University to take an active role in reducing its cloud traffic.

Conclusion

In conclusion, the need for our university to become more sustainable has never been more critical, especially in the light of the ongoing energy crisis. With climate change and dwindling natural resources threatening our planet's future and current livelihoods, it is our responsibility to take action towards creating a more sustainable academic community.

One key area where our university can make a significant impact is by adopting energy-efficient practices like taking a closer look at our buildings and transitioning to renewable energy sources. This can involve initiatives such as installing more solar panels, using energy-efficient lighting practices and facilitating staff and students in switching to more sustainable means of transportation. By taking these steps, the University of Groningen can reduce our carbon footprint and contribute to global efforts to combat climate change, whilst being an example for other organisations. Moreover, such efforts can lead to cost savings in the long run, while also contributing to the financial stability of our institution in the present time.

Ultimately, creating a more sustainable university requires a collaborative effort from all stakeholders, including students, faculties, staff and our central organisation. By raising awareness, encouraging sustainable behaviour and creating a green workspace, we can create a healthier, more environmentally conscious campus. The University of Groningen has a vital role to play in addressing the energy crisis and creating a more sustainable future. By prioritising sustainability and adopting energy efficient practices, we can be on the forefront of a change that is long overdue. SOG hopes that the proposals and ideas stated in this report will help all organs within the university with making a positive change.

Making it better. Together.

The 50th SOG faction,

Laura Keijzer
Hanna van Dalfsen
Ruben Wagenvoort
Wout Trox
Mariia Abdurashitova
Naomi Scholte

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Julia Hofma (Commissioner of External Affairs and Sustainability Officer of Atmos Study Association);

Anne Mombarg (Vice Chairperson of Ibn Battuta);

Fay Sterken (Chairperson USVA);

Nils Elzinga (Secretary of Working Groups FSE);

Martien Visser (Lector at EnTranCe);

Rik Klement (Portfolio Holder External and Research, Green Office);

Marijke Nieborg (Project Leader Sustainability in Research and Education, Green Office);

Selien Brandse (Faction SCEB).

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