

SUSTAINABILITY & THE ROLE OF HIGHER EDUCATION INSTITUTIONS



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Date of completion: 18/05/2021

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Word count: 11.980

Executive Summary

This dissertation explores the role of higher education institutions (HEIs) regarding sustainability.

Firstly, it defines key terms, namely sustainability and green strategy. To further investigate what green strategies are, a few examples of sustainable strategies will be given. Subsequently, a timeline of the events regarding the evolution of ESD is presented, together with a few challenges HEIs might face when implementing sustainable actions on campus.

The research question was answered through qualitative research, including but not limited to the literature review, desk research, and mainly interviews. Most subjects interviewed were staff members from the green office of higher education institutions both inside and outside the European Union. To select the most sustainable universities a detailed criteria table containing 16 criteria was used to assess them. Additionally, an overview of the four most sustainable universities is presented.

Ultimately, this dissertation aims to provide a guideline created based on contemporary successful sustainable strategies implemented at present by the four highest-ranked universities on sustainable performance, being University of Cork (IR), Vrije Universiteit Amsterdam (NL), University of Victoria (CA), and University of Tasmania (AU).

This dissertation is limited because of the minimal options to communicate with the HEIs worldwide (email) due to COVID-19. Therefore, the assessment of a few universities was made based solely on the information found on the institutions' website/reports, rather than having the criteria table filed out by a staff member from the green office, which was the standard procedure.

Lastly, based on the findings, this dissertation presents a 5-steps guideline, as the answer to the central question: *“What are the critical success factors for higher education institutions when implementing a green strategy?”*, divided as follows: 1. Establish a Green Office, 2. Create a Sustainable Action Plan, 3. Execute Sustainable Action Plan, 4. Monitor & Evaluate and finally 5. Report & Inform. When creating an SAP (2), universities are advised to focus on five areas, namely ESD, Commuting, Food, Energy & Waste. Furthermore, for steps 3, 4 & 5 the reader is provided with two ideas of strategies currently implemented by one of the four highest-ranked universities previously mentioned. This not only confirms that the GS works but also allows the reader to further investigate them on the HEIs reports/website.

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Preface

This dissertation entitled “Sustainability & the Role of Higher Education Institutions” has been written as the final step required by The Hague University of Applied Sciences (THUAS) to conclude my bachelor’s degree in European Studies, a four-year Bachelor of Arts program with a specialization in the public sector. I was conducting interviews, collecting research information, and writing this final report from October 2020 to May 2021.

The topic was chosen due to my passion for sustainable development and thought-provoking vegan ideas. This project was supervised by Mr. Pijlman, who helped me to formulate the research questions and assisted me throughout the process. The core objective of this dissertation is to provide guidelines for universities on how to become more sustainable.

Firstly, I would like to thank my mom for her helping me to move out of my home country Brazil and seek better living conditions. Secondly, I would like to thank my best friends Lisa, Lotte and Wesley for keeping me motivated the innumerous times I was about to lose faith in myself. Finally, I would like to thank my internship manager Emeline, for her flexibility and letting me conduct interviews during working hours.

The Hague, 18th May 2021

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1. Introduction

One of the biggest issues of the 21st century is the unprecedented environmental challenges.

According to the IPBES report, around 1,000,000 plants and species on Earth are in danger of extinction (UN, 2019). Climate change is a topic consistently present on the UN agenda, political campaigns, and informal debates, hence the importance to integrate sustainability in higher education institutions (HEI).

Universities are established to promote the integration of individuals within society, not only by training competent professionals for the labor market but also by fostering social change.

“No institutions in modern society are better equipped to catalyze the necessary transition to a sustainable world than colleges and universities. They have access to the leaders of tomorrow and the leaders of today. What they do matters to the wider public”

- David W. Orr, professor and author, Oberlin College, from *The Last Refuge*, as cited in (Eagan, Keniry, & Schott, 2008, p. 4)

In the present day, it is crucial to encourage institutions from both the public and the private sector to jointly raise awareness of sustainability and environmental protection. Practicing sustainable actions and treating other living things with fairness is crucial at this point.

Therefore, sustainability should be inserted into the framework of HEIs. Ultimately, the goal of this research is to propose a guideline based on contemporary successful green strategies implemented by the four highest-ranked universities on sustainable performance.

1.1 Research Question and Sub-questions

For the reasons previously stated, the central question of this research provides as follows:

Sustainability and the role of universities: What are the critical success factors for higher education institutions when implementing a green strategy?

To answer the main research question, the following sub-questions will be examined:

1. What is sustainability?
2. What are green strategies?
3. What are the historical events regarding sustainability in the ESD?
4. Which EU sustainable policy initiatives are aimed at green strategies for European high education Institutions? Are they truly helping to implement green strategies?
5. What are the challenges of implementing green strategies in higher education institutions?
6. How can the local government assist higher education institutions to implement green strategies?

1.2 Limitations

Due to the COVID-19 pandemic, contacting staff members of the GO in the HEIs was extremely difficult and in some cases not viable, considering that I had to rely solely on email responses since most of the institutions' physical locations were closed. Additionally, many staff members were extra busy because of the online classes or simply unavailable for personal reasons, which resulted in a lower quality of information for the university ranking.

List of Abbreviations

HEI	Higher Education Institution
SAP	Sustainable Action Plan
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
TBL	Triple Bottom Line
UN	United Nations
UNEP	United Nations Environmental Program
UNIDO	United Nations Industrial Development Organization
CSF	Critical Successful Factors
EU	European Union
ESD	Education for Sustainable Development
CSR	Corporate Social Responsibility
4R's	Reduction, reuse, recycle and recover
SDG	Sustainable Development Goals
GS	Green Strategy(ies)
GO	Green Office
LEI	Leiden University
SIPS	Sustainability Integration Program for Students
AASHE	Association for the Advancement of Sustainability in Higher Education
ECO-ED	The World Congress for Education and Communication on Environment and Development
SA	South Africa
UNDESD	UN Decade of Education for Sustainable Development
GAP	Global Action Program
GEMR	Global Education Monitoring Report
CSFs	Critical Successful Factors
SSI	Semi-Structured Interview

THEWUR	Times Higher Education World University Ranking
UVic	University of Victoria
GHG	Greenhouse Gas
UCC	University of Cork
UTAS	University of Tasmania
USP	University of São Paulo
STARS	Sustainability Tracking Assessment and Rating System
VU	Vrije Universiteit Amsterdam
CEOs	Chief Executive Officer
DRUPS	Diesel Rotary Uninterruptable Power Supply
BREEAM	Building Research Establishment Environmental Assessment Method

2. Methodology

The core goal of this research is to provide clear guidelines for HEI that have the ambition to become more sustainable by implementing green strategies. Therefore, the central question is: *“Sustainability and the role of universities: What are the critical success factors for higher education institutions when implementing a green strategy?”*

2.1 Qualitative Research Method

The Qualitative Research approach was mainly applied in this research (Creswell, 2007, pp. 12-14). This is to say that this study relied mostly on qualitative research, including but not limited to, literature reviews, theories, interviews, and description of terms. It is also worth mentioning that the information used in this study has been obtained through both field and desk research.

2.1.1. Scope of the interviews

The preferred method to collect the qualitative data was the qualitative interviews in a semi-structured interview format (SSI). This means that a certain number of questions with several sub-questions were written beforehand, however, the interviewee was given the liberty to mention information considered applicable or essential for this research. Moreover, the questions were a combination of open-ended and closed questions (see appendix J. Interview Questions'), to allow the interviewee to explore the "whys" and "hows" to it (Adam, 2015, p. 492). The main disadvantage of such a format, Adam (2015) explains is that SSI interviews are time-consuming; from setting up the one-on-one interviews to analyzing the notes and writing down the transcripts, which requires many hours and effort (Adam, 2015, p. 493).

Initially, the idea was to interview only individuals who work in the GO/sustainable departments of universities. However, after giving some thought and due to the limitations caused by COVID, the author of this paper realized that having the point of view from experts in the field of sustainability, who do not necessarily perform activities within HEI, would also be valid and relevant.

Potential interviewees were chosen based on how well the university they work at scored on sustainability. Additionally, as mentioned previously, experts in the field of sustainability were contacted based on projects they participated in and their academic background. Furthermore, the interviewees were first contacted via email. Due to the limitations caused by COVID-19 and the fact that the respondents reside in different countries or even continents, all the interviews were conducted via either Skype or Google Meet. None of the interviews was face-to-face. Finally, the interviews lasted between 30 to 60 minutes, to minimize tiredness for both parties (Adam, 2015, p. 493).

2.1.2. Scope of the university selection

A total of 20 universities (see appendix K “Most Sustainable University Ranking”) from the following countries: Australia, Brazil, Canada, China, Finland, France, Germany, Ireland, Italy, New Zealand, Russia, The Netherlands, United Kingdom, United States were ranked on a scale from 1 –3; (1. YES - meaning that the university has what is described in the criterion / 2. NO - the university does not have what is described in the criterion & 3. NOT APPLICABLE/NOT MENTIONED – no response from the university and the information could not be found on the universities' website). The HEIs were selected based on the two frameworks; the THEWUR ranking for the SDGs 7,13 and overall ranking (THEWUR, 2020), and the START tracking system (STARS, n.d).

2.1.2.1 Criteria table

To fairly rank the universities, a total of 16 criteria divided into 7 subcategories (see appendix L ‘Criteria table’) were created based on the EU Green Deal and its four main targets (European Council, 2017), the Green Office Programme (GO!) from the Chinese University of Hong Kong (CPSO, 2019) and finally the Sustainability Assessment Questionnaire for Colleges and Universities (ULSF, 2009, pp. 6-7).

3. Literature Review

This literature review begins with a brief synopsis of scholarly efforts to define sustainability, starting from a broad definition to a narrow one, focusing on the university context.

After that, a few examples of what green strategies entails are presented, once again starting from a broader definition to a subdivision; simple initiatives and drastic changes.

Finally, the reader is provided with a short chronologic overview on the sustainable policies/initiatives the EU has set dating as far back as 1992, since this is from when environmental issues were properly addressed, until the most recent initiative namely the EU Green Deal (2019).

3.1 What is sustainability?

Defining sustainability is not a straightforward task. When attempting to explain the question of what sustainability is, experts and scholars often use the definition from the Brundtland Report also known as Our Common Future. The report defines sustainable development as: "Development that meets present needs, without compromising the ability of future generations to meet their own needs" (UN, 1987). In other words, sustainability is a concept that, in its origin, refers to the term sustainable development, which defines the type of development concerned with preserving the environment today, so that future generations can also enjoy it. The report also emphasizes that to achieve sustainable development, the basic needs of society are to be met, including (but not limited to) health, education, food, and housing.

Similarly, UCLA defines it as: "the integration of environmental health, social equity, and economic vitality in order to create thriving, healthy, diverse and resilient communities for this generation and generations to come. The practice of sustainability recognizes how these issues are interconnected and require a systematic approach and an acknowledgment of complexity" (UCLA, n.d). This definition, however, highlights the changes regarding the issues we have been facing and stresses that cooperation is a crucial factor.

On the other hand, UNESCO's definition emphasizes that sustainability might vary from culture to culture since it also includes people's attitudes: "Sustainable Development is more about new ways of thinking than about science or ecology. Whilst it involves the natural sciences and economics, it is primarily a matter of culture" as cited in the book 'Sustainability in the Arts and Humanities' (Sykes, 2013).

Considering that it is not an easy task to agree on a definition for the word sustainability, authors such as Leslie Paul (2016) decided to do the inverse and define what sustainability is NOT; "a practice, relationship, or institution is not sustainable if it undermines the social, economic, or environmental conditions of its viability" (Thiele, 2016, pp. 2 - 3).

In summary, based on the definitions above, sustainability can be defined as the ability of how human beings to interact with the world, preserve the environment in a way that does not compromise the natural resources of future generations.

3.2 What are green strategies?

Peng & Lin as cited in (Azeem, 2017) define GS as “practices that produce environmentally-friendly products and minimize the impact on the environment through green production, green research and development, and green marketing”. The definition focuses solely on companies that sell physical products, considering that it explains the green strategies within goods production (from manufacturing the product, to product marketing). However, companies and organizations that provide services, require a clearer explanation about possible green strategies they could implement.

Olson (2008) states that the core goal of a green strategy is to “help an enterprise make decisions that have a positive impact on the environment”. By doing so, it cultivates a green culture that encourages significant changes in people’s way of thinking. Olson also lists practices that organizations may follow to raise environmental awareness and expectantly make it a green habit: lead by example, provide training, install appropriate tools, measure and report performance, make it everyone’s responsibility and create a communication and change management plan (Olson, Creating an enterprise-level “green strategy”, 2008).

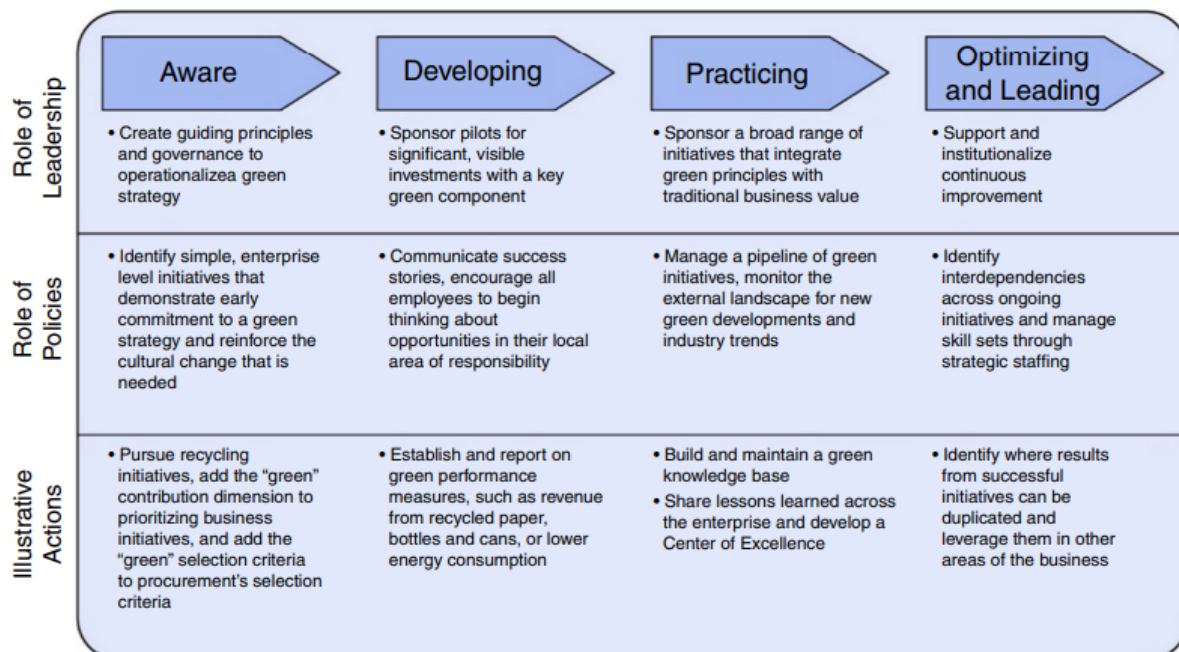


Figure 1. (Olson, Creating an enterprise-level “green strategy”, 2008) *green strategy maturity model and assessment framework*

Olson, on the other hand, focuses more on the beneficial side of implementing green strategies, not so much on the definition itself or the “how to” side.

An explanation for what green strategies entails can also be based on the definition of Green Economy; the UNEP defines the Green Economy as “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UN, 2011). Another more elaborate definition of green actions is: “strategies that produce/provide an environmentally friendly product/service or uses an environmentally friendly process, or both” (Majurin, 2017, p. 29). In other words, GSs are to assist organizations/companies to increase their profits, whilst taking the protection of the environment into account.

Azeem (2017) goes one step further on the definition and explains that there are two types of green strategies; simple initiatives, such as reducing paper consumption by photocopying double-sided, or a more drastic approach which requires changes in the business model of the organization, by adopting new corporate strategies and a restructuring of the organization (Loknath & Abdul Azeem, 2017, p. 694). The type of GS adopted will depend on the type of organization, in the view that a company that provides products and services has a different business plan, needs, and impact on society, as opposed to a higher education institution, for instance. For this reason, this paper will focus only on one type of organization, namely universities, to propose adequate guidance.

3.2.1 Examples of Green Strategies

Acting with social responsibility in the market and fulfilling the obligations established by environmental laws have become crucial for the development and survival of institutions in the global market since globalization has been demanding environmentally friendly products and services. GSs promote numerous benefits since, in addition to a great competitive advantage for companies/organizations, it also favors society in its culture, education and extends the useful life of natural resources for future generations (Cronin et al, 2010, p. 170). Therefore, organizations that wish to institute GSs in their actions, should not only consider the sale of the product and services, but also the basis that originates sustainability, which is social, environmental, and economic responsibility.

The figure below summarizes the most common GSs organizations may opt for.

RECYCLING AND WASTE REDUCTION	➤	Reduce • Reuse • Recycle • Separate waste • Dispose in a suitable way
ENERGY AND WATER CONSERVATION	➤	Save heat and electricity • Save water • Use efficient equipment • Use only when needed • Source from renewable sources
POLLUTION PREVENTION	➤	Use low emission equipment • Operate efficiently • Use degradable materials
GREEN PROCUREMENT	➤	Procure environmentally sustainable and local materials/products • Choose suppliers that try to be environmentally friendly
GREEN DISTRIBUTION	➤	Avoid transport to far- away places • Use the most sustainable method of transport • Choose distributors that try to be environmentally friendly
DECENT WORK	➤	Provide productive work, a fair income, security in the workplace, social protection, voice, and equality of opportunity and treatment

Figure 2. Main pillars of greening processes in businesses (Majurin, 2017, p. 7)

3.2.2 EU Green Deal

Announced in December 2019 by the new president of the European Commission, Ursula Von der Leyen, The European Green Deal (Figure 4) establishes a strategic roadmap with concrete milestones that place the energy and sustainable transition at the center of the political action. Its program, which has strong support from the main European governments, states the following objectives:

- 🌍 Achieve a climate neutrality EU by 2050;
- 🌿 Protect human beings, animals and plants;
- 🌱 Ensure a fair and inclusive transition;
- 🏠 Develop clean, reliable and affordable energy, as well as to provide financial support for the transition;
- 🏡 Transform agriculture and rural areas (EC, n.d).

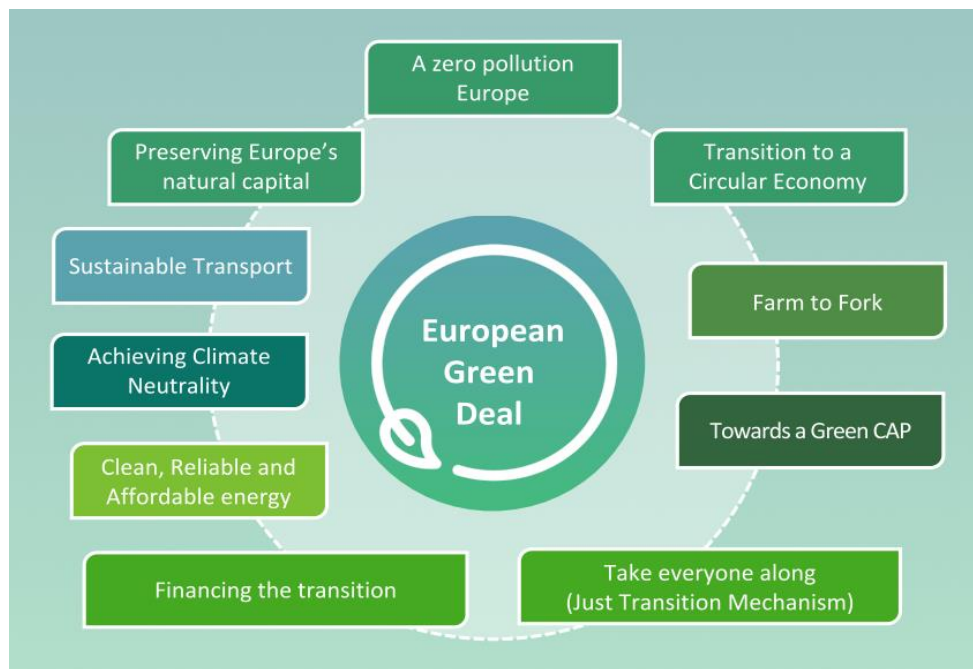


Figure 3. The European Green Deal goals. (EC, n.d.)

3.3 What are the historical events regarding sustainability in the ESD?

Some would argue that Charles Hopkins is the person who has been the most actively involved with Education for Sustainable Development (ESD) than anyone. It all started back in 1986 when Charles presented a paper to the Brundtland Commission. After that, he joined the Earth Summit (1992) and contributed to the creation of Agenda 21. He also attended other conferences, such as the Johannesburg World Conference, and led the committee that commenced the Bonn Declaration. Nowadays, Charles Hopkins is the advisor to the UN University's Global Network of Regional Centres of Expertise on ESD, where he coordinates a wide variety of initiatives in the field of sustainability and education (Yorku, n.d).

3.3.1 History of ESD

The history of the ESD has gone through many changes since Hopkins first started bringing attention to this matter. Here are the main events regarding the evolution of ESD:

1989 - During the creation of the Agenda 21 document, topics such as education and awareness-raising were linked to the idea of sustainable development for the first time. It also included Chapter 36, which emphasizes “Promoting education, public awareness and training” (UNSD, 1992).

1992 - The UN Secretary-General invited UNESCO to operate as the head organization for Chapter 36 and to create a theoretical foundation refocusing education. Moreover, the World Congress for Education and Communication on Environment and Development was held. ECO-ED was a conference in which sustainable development has discussed the corporation of education (UN, 1996).

2002 - Countries acknowledged that more emphasis should be placed on education during the World Conference on Sustainable Development (SA). First steps towards the creation of the UN Decade of Education for Sustainable Development (UN, 2002).

2005 - 2014 - UN Decade of ESD (2005-2014) was declared through a resolution by the UN General Assembly declared the UN Decade of ESD (2005-2014). The purpose of UNDESD was to incorporate green values into the education system. ESD started to be taken more seriously by nations (UNESCO, n.d).

2012 - countries urged UNDESD to carry on planning the ESD activities within UNDESD (UNESCO, n.d).

2014 - A total of 360 commitments declaration is approved by the ministers of education during the World Conference on Education for Sustainable Development in Japan. Furthermore, UNESCO presents the Global Action Program on ESD, in which the main goal was to expand and advance quicker ESD within sustainable development (UNESCO, n.d).

2015 - SDG 4 – QUALITY EDUCATION, formally called Education 2030, was included in the list of the 17 SDGs during the World Education Forum in Korea. Besides that, the Global Education Monitoring Report (GEMR) was adopted. These documents assess how nations are progressing regarding SDG 4 (UNESCO, n.d).

2016 - The SDG Agenda containing 17 goals adopted in 2015 was finally put into practice. ESD

(within SDG 4) was highlighted to draw the attention of educators all over the world (UN, n.d).

2019 - During the 40th meeting of UNESCO General Conference, the Education for Sustainable Development is introduced as a new ESD model (UNESCO, n.d)

2020 - The ESD narrative has not come to an end yet. Much still needs to be done. COVID-19 has shown that unfortunately, education as a basic human right is still not an achievable goal. According to Education During COVID-19 and Beyond report, by mid-April 2020, “94 percent of learners worldwide were affected by the pandemic, representing 1.58 billion children and youth, from pre-primary to higher education, in 200 countries” (UN, 2020).

3.4 EU sustainable policy initiatives

To bring the reader up to date with the sustainable policies/initiatives that have been created by the EU/UN so far, a short chronologic overview is provided. It starts from the Stockholm Conference (1972) since this is when the word sustainability started to appear on agendas and it ends with the EU Green Deal, December 2019.

To commence with, the Stockholm UN Conference in 1972 marked the consolidation of environmental awareness. It introduced the environment as an element to be considered when discussing issues related to economic development (UN, n.d).

Subsequently, the second important conference took place twenty years later (1992), the Earth Summit in Rio de Janeiro, Brazil. During this event, the concept of ESD originates. Further discussions include the existing environmental problems and their possible consequences, for instance. Additionally, the attendees also analyzed the progress made since the first conference in Stockholm, and two conventions were approved during this convention, namely biodiversity and climate change. (Encyclopaedia Britannica, n.d).

Another very significant document signed during the event was Agenda 21, an action plan and goals with recommendations on how to achieve sustainable development. According to this document, the environmental conservation of the planet cannot be achieved without the eradication of poverty and the reduction of social inequalities. (UN, n.d).

Later on (September 2002) under the coordination of the UN, the World Summit on Sustainable Development was held in Johannesburg South Africa, and it marked the 10 years of the last major environmental conference, the Earth Summit. One of the main objectives of the conference was to

put into practice the commitments of the parties to agreements already signed, especially concerning Agenda 21 aiming at the protection of the planet and its sustainable development (UN, n.d).

In December the same year, the UN General Assembly adopted Resolution 57/254, which emphasizes that education is an indispensable element for achieving sustainable development (UN General Assembly, 2003).

In 2007, further resolutions on ESD were adopted by the UNESCO General Conference, acknowledging that more actions should be taken by both UNESCO itself and States to remodel the learning techniques regarding sustainable initiatives. (Nolan, 2012, p.11).

Two years later, the Bonn Declaration (mid-Decade) declaration highlights the need to tackle climate change and the importance of taking education into account to do so. Initiatives such as: develop study plans on sustainability, create programs that prepare students for careers in areas related to sustainability, improve teaching and learning methods, and promote quality education at all levels, to name a few (UNESCO-UNEVOC International Centre, n.d).

Later on, the Human Development Report (2011) explained the role of ESD focusing on sustainable consumption (Nolan, 2012, p.11).

In September 2015, all the UN General Assembly member countries agreed on 17 goals most well known as the Sustainable Development Goals (SDG). The main objectives were to eliminate poverty, combat inequalities and injustices, tackle climate change and build a common world by 2030. The SDGs, adopted on September 25, in New York, by the United General Assembly, officially replaced the eight Millennium Development Goals (UN, n.d)

Finally, announced in December 2019 by Ursula von der Leyen (European Commission President), the European Green Deal presents a guideline to help the EU to achieve carbon neutrality by 2050. The document explains the methods that will be used in different sectors, to absorb possible reductions in CO2 emissions in Europe (European Commission, n.d).

As it can be seen the EU together with the UN have been attempting to tackle climate change as well as other problems that are a result of lack of environmental awareness, since the early 70s. Although, in the 2020s some citizens are still not sure how they could be more actively involved in the problem-solving process. That is why universities must equip each individual with the tools and knowledge needed to create a positive impact every day.

3.5 What are the challenges of implementing green strategies in higher education institutions?

According to James Martin (2012) the author of the book “The sustainable universities: green goals and new challenges for higher education leaders” there are four main challenges that institutional leaders might be faced with:

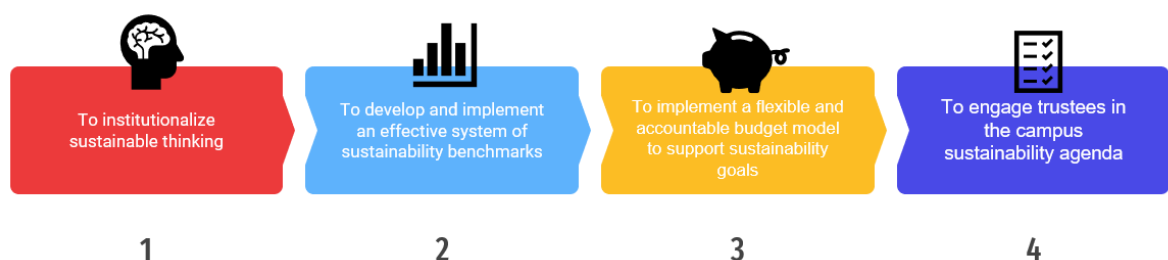


Figure 4. Challenges (Martin & Samels, 2012, p. 5)

3.5.1) To institutionalize sustainability thinking

According to Geoff Chase, (as cited in Martin & Samels, 2012, p.6), HEIs do not offer a cross-boundary way of thinking, which is highly required, considering that sustainability is something inherently interdisciplinary. It has to do with interdependence and connectedness.

3.5.2) To develop and implement an effective system of sustainability benchmarks

Comparable to any other performance, measuring the progress of universities helps to spot weaknesses and strengths. The former executive director of AASHE Judy Walton (as cited in Martin & Samels, 2012, p.7) clarifies that “A rating system provides a clear road map for a campus to reach a benchmark level at any time. In contrast, a ranking system provides no clear target”

3.5.3) To implement a flexible and accountable budget model to support sustainability goals

One of the biggest challenges faced by the leadership team is to budget tactically in order to achieve sustainable goals. Often, institutions’ lack of funding and/or business plans results in the capital being spent in other areas which are believed to be a priority. Not to mention the up-front costs of sustainable actions, which can either turn into a short-plan initiative or lack maintenance (Martin & Samels, 2012, p. 8).

3.5.4) To engage trustees in the campus sustainability agenda

Guidance, training, and supervision are never sufficient when it comes to engaging board games. As to effectively capture their interest, extensive orientation regarding the sustainability within the institution is required (Martin & Samels, 2012, p. 9).

3.6 How can the local governments assist higher education institutions to implement green strategies?

Sustainable development is an issue that has gained prominence and there are a variety of reasons for that. One may argue that it has to do with the need for greater savings within public agencies, followed by the population's demand and how society is structured, which no longer supports unrestrained consumption.

Because of this reality, the public sector must be aligned to the relevance it represents as an inducer of structural changes within the main productive and sustainable consumption sectors. For this reason, contracts must be promoted with transparency, but also with technological innovation and rational use of resources.

The idea of covering public procurement is to promote the appreciation of more sustainable purchases and the use of services that are linked to environmental responsibility. Thus, the public power becomes an instrument to protect the environment, in addition to promoting economic and social development (Saha & Paterson, 2008).

It is undebatable that to achieve sustainable development for all, a joint effort is required from both the public and the private sectors. However, local governments have an important role when it comes to education, researching, political training, and the exchange of information necessary to facilitate sustainable development. They are in an advantageous position to solve impediments related to the education institutions' attendance in local communities. Local governments can incorporate vocational and scientific practice programs into local economic development strategies, as a way to guarantee that such preparations are useful to labor market opportunities in the foreseeable future (UCLG, 2015, p. 6).

Additionally, governments must make sure that funding provided by federal/central banks support government policies in pursuit of sustainable development objectives. Furthermore, university leaders are also expected to head initiatives, supporting as well as supervising the engagement of both external and internal resources (Al-Roubaie & Sarea, 2019).

4. Theoretical Framework

4.1 The triple bottom line

The concept of the three pillars of sustainability, also known as the triple bottom line (TBL), was created by the British author John Elkington, in the 1990s, in his book “Cannibals with Forks: The TBL of 21st Century Business” (Shaffer, 2018, p. 2). The method incorporates the sustainable vision in companies/organizations based on three principles: People, Planet, Profit, also known as the 3Ps of sustainability (Stanislavská, Margarisová, & Šťastná, 2010, p. 63). Sustainability within organizations is no longer considered an unimportant issue, instead, it increases the organization’s likelihood of earning respect and admiration of its consumers and stakeholders.



Figure 5. TBL (nimblex.com, 2010)

4.1.1 Environmental perspectives - Planet

Contrary to popular believe, sustainability is not mainly an environmental concept. To guarantee that physical resources are preserved for future generations, effective management is a must; meaning that not only the exploration of non-renewable resources, but also the effects of industrialization and environmental pollutants are properly addressed (Crane & Matten, 2016, p. 34). There are many ways to adapt the production chain, depending on the type of organization and which services/products it offers. Alternatively, the organization might hire an expert who could assist them by measuring the impact of the organization’s commercial activities, and/or proposing greener solutions (sustainabilitydefinition.org, n.d).

4.1.2 Economic perspectives - Profit

Economic sustainability is established on a sustainable management model, which implies adequate management of natural resources based on long-term strategies, “focusing on the economic performance of the organization and how it develops, produces and market its services/products” (Crane & Matten, 2016, p. 34). Furthermore, the maintenance of ethical values, transparency, and attitudes towards customers; essentially the organization’s behaviors and impacts on the economic framework it belongs to, are contents to be considered when referring to economic sustainability (Stanislavská, Margarisová, & Šťastná, 2010, p. 64). Therefore, examples of economically unsustainable activities would be building cartels or bribery since such activities compromise the long-term functioning of markets. (Crane & Matten, 2016, p. 34).

4.1.3 Social perspectives - People

Social responsibility is perhaps the most challenging concept within the TBL. Contrary to popular belief, it does not only include employees, stakeholders, and local communities, rather, it applies primarily to a global level, in the view of social justice (Crane & Matten, 2016, p. 35).

According to Credit Suisse (2013), as cited in Crane & Matten, 2016, p. 35, 10% of people own 86% of the global wealth. Such figures illustrate how unequal the world’s GDP is divided among developed and developing countries. The economic adviser Robert Reich explains In the documentary “Inequality for All” that such social and economic inequality is not only an issue for the global long-term economy but also unsustainable (Cadwalladr, 2013).

4.2. Corporate Social Responsibility

Nowadays, organizations both from the public and the private sector are more concerned with the concept of social responsibility. Given harsh penalties suffered by industries that polluted the oceans and the actions of organizations that defend the environment as well as the struggles for the workers’ defense, it is inevitable that every company feels the duty to adopt new practices and change their behavior. Not only managers but stakeholders are also concerned with matters of public interest. Consumers are attentive to organizations that show interest in these matters, considering this concern as a significant differential for their reputation.

According to the UN, CSR is associated with ethical and transparent management that the organization must have with the parties that are directly or indirectly linked, such as employees, suppliers, stakeholders, customers, the local community, society, and the environment the organization is located in, to minimize its negative impacts. In other words, CSR is closely linked to the TBL concept, considering that it attempts to achieve a balance of environmental, economic, and social imperatives (UNIDO, n.d).

The World Business Council for Sustainable Development defines (See Figure 1) CSR as “Corporate social responsibility is the continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large” (Watts, Holme, & Tinto, 2016, p. 3)

The figure below illustrates the connection between sustainable development and CSR

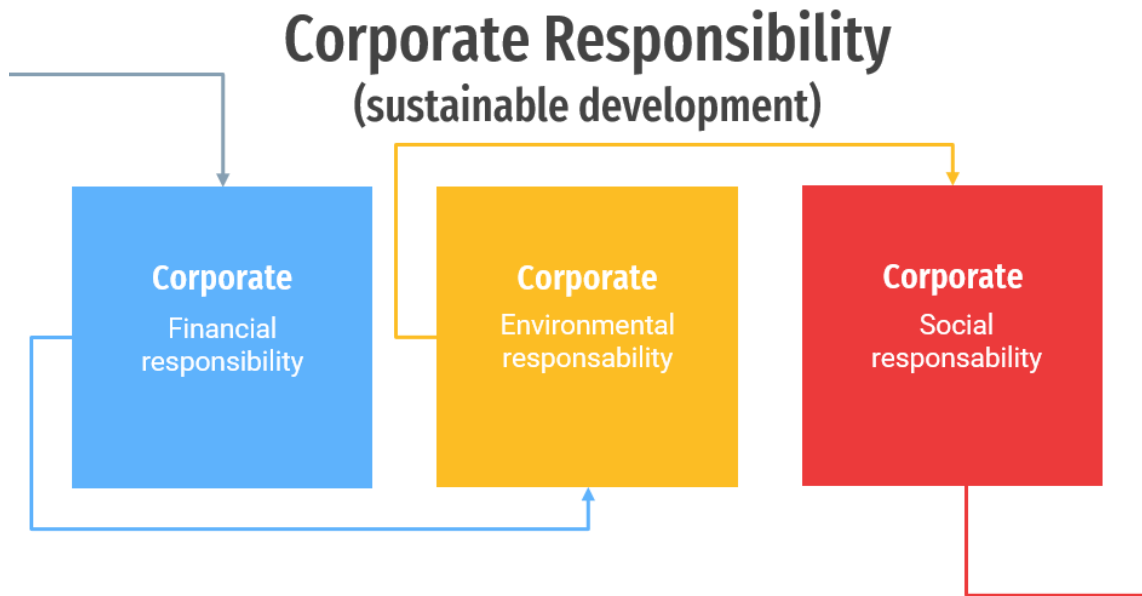


Figure 6. *Corporate Responsibility & Sustainable Development* (Watts, Holme, & Tinto, 2016, p. 3)

5. Results

5.1 What is sustainability?

Nowadays, one of the most used words to talk about the environment and the negative impacts caused by human beings is sustainability; a term that has a wide variety of meanings. Biology, for instance, relates to the ability of ecosystems to recover from human impact or even from the environment itself (biologyonline.com, n.d).

Sustainability can also be used in conjunction with the word development. In that case, it refers to ways of preventing the depletion of our natural resources and being able to meet the needs of the current population. In spite of its extensive use, (Dobson, 1996) sustainability is a term that has been utilized and interpreted in substantially different ways (Crane & Matten, 2016, p. 31).

According to the environmentalist and activist Paul Hawken, sustainability is about “stabilizing the currently disruptive relationship between earth’s two most complex systems – human culture and the living world” (environment-ecology.com, n.d).

As mentioned in the literature review, the most commonly used/accepted definition is the one found in the Brundtland Report, where sustainability is characterized as "Development that meets present needs, without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987).

Experts on sustainability have given their own definition for it. This chapter shows how the interviewees conceptualized sustainability.

According to Soam (2021) sustainability is “being able to continue prospering both in the short and the long-term, with emphasis on long-term”. He explains that it also has to do with planning one’s action to assure that it will not adversely affect their future capacity to do something else (Zeijlmans, 2021).

Joanna (2021) on the other hand, presents more of a philosophical definition:

“it’s a way of living, thinking about something bigger than ourselves and our household, our lives”. She agrees with Soem regarding planning future actions, however, more on a daily basis/short-term actions, rather than long-term ones (Zhuravlova, 2021).

Pau (2021) believes that sustainability is basically the “idea of operating while minimizing the damage or while not causing damage whatsoever”. Pau clarifies that the definition of sustainability may vary depending on the context and/or individual who is being interviewed. Paul as a sustainability consultant defines sustainability as operating in a way that does not harm the environment or reduces its maximum output (Ferran, 2021).

Irene (2021) defines sustainability along the SDG lines, she says that “sustainability is mainly related

with environmental and social sustainability. Indeed, that word for environmental sustainability is mainly the via how we lower the negative environmental impact that we have on the environment". She emphasizes the idea that sustainability and society go hand in hand (Maltagliati, 2021).

Eleri (2021) personally thinks that sustainability is about thinking of how to improve business practices in their operational system, and to incorporate social, environmental, and economics. Preventing long-term damage to the environment by planning cost-effective activities is crucial, she says (Davies, 2021).

Corey (2021) points out that there are innumerable definitions for the word sustainability the main idea being a multi-generational concept. However, Corey commented explicitly that sustainability is a poorly demarcated topic and prefers to look at it differently. He discards the three concentric Venn diagram circles. Corey prefers the SDG approach, which is the concept where the big circle is the environment, then there is society, then within that, there is the economy. He likes this one best because it shows the interdependence as well, meaning that the environment can succeed without the other two, but economy is unable to survive without the other two (Peterson, 2021).

Rodrigo (2021) thinks that "sustainability is a method of fulfilling economic, social and environmental needs of the current and future generations within the means of our planet" (Zapata, 2021).

Paulo (2021) says that "sustainability could be known as the value and social way to building the best way of life with equity, collaborations and responsibility for use and consumptions of goods in society and the environment for now and the future generations" (Almeida, 2021).

Based on the interviewees' answers, it can be seen that sustainability could not be defined as a word in itself. Instead, most of them included the idea of long-term/short-term actions, as well as the societal and economic aspects. In addition, the multi-generational concept is present in most of the definitions.

5.2 What are green strategies (GS)?

In the globalized world, general information and news on environmental disasters have become more frequent with the increase of communication channels between nations. In modern society, consumers are more concerned with the environmental impacts, development, and manufacturing of products. They are also motivated to make good use of their buying power, in order to discourage commercial practices that harm the environment. Given these circumstances, companies/institutions have been challenged to develop new competitive strategies, well-known as green strategies (GS), which not only refrain from environmental degradation but also guarantee financial sustainability (Panel of Experts, n.d, pp. 7-8).

With a few words, Soam describes what a GS should be; a plan/action that helps one to be sustainable. He also mentions that the activities he conducted in the green office (GO) in LEI were in his opinion GSs, considering that they adhere to the mission and sustainability goals of the organization. (Zeijlmans, 2021).

Joanna explains GSs from more of a hierarchical point of view. She claims that GSs must come from the top, such as regulations, directives, and decisions. Everything that is enforced by law in the field of sustainability could be called GS (Zhuravlova, 2021).

For Pau, GSs would be those strategies that somehow contribute to his definition of sustainability, namely actions that allow society to operate in a way that either does not cause damage to the environment or helps to minimize the harm. He also believes that just like sustainability, the definition of GS depends on the context/profession (Ferran, 2021).

Irene narrows down the definition to any action that aims to create some change towards more sustainability, including but not limited to projects, initiatives, policies, events, and awareness-raising campaigns (Maltagliati, 2021).

Eleri, on the other hand, is more critical in her definition. To her, for a strategy to be considered green/sustainable, it needs to address the interdisciplinary aspect of sustainability and bring those concepts that we familiar with, for instance, TBL strategy, into practice. Furthermore, based on the experience she acquired while working in the GO of the University of Victoria, successful GSs truly engage with the stakeholder and create a real connection between the strategy itself and the implementation of that strategy (Davies, 2021).

Corey raises an interesting point, he says that if you look at sustainability as holistically as it needs to be a GS can be almost anything. He refers to greenwashing practices and false eco-friendly

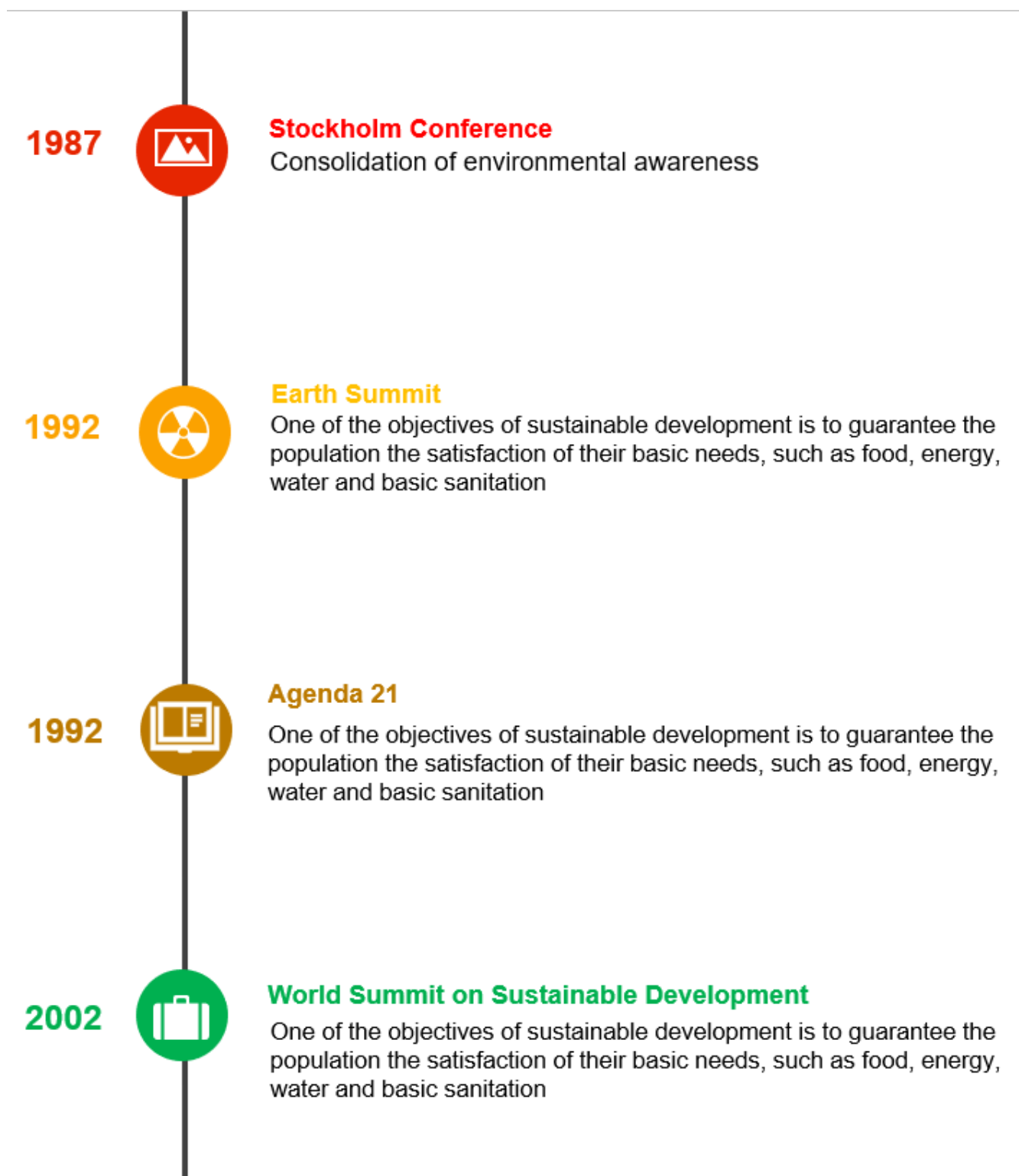
actions. He explains that many organizations either focus substantially on financial sustainability when they talk about it, or they just talk about environmental sustainability. However, many other important topics get lost in the middle, such as the socio-cultural sustainability elements, which are very contextual to place, he says (Peterson, 2021).

Rodrigo thinks it is quite easy to identify a GS. First, the institution/company has to decide which framework they would like to implement, SDG, the Doughnut model, and so on. Thereafter, any action executed directly or indirectly linked to these frameworks can be considered a GS (Zapata, 2021).

Paulo goes one step further in his definition and explains that GS could be seen as a tool to improve public policies and boost the quality of life by implementing a competitive economy in which environmental resources and the welfare of citizens are prioritized. Additionally, other elements should be considered, such as the education system, environmental protection, and social and economic equality (Almeida, 2021).

5.3 What are the historical events regarding sustainability in the ESD?

The timeline below shows several important events already described in the Literature Review:



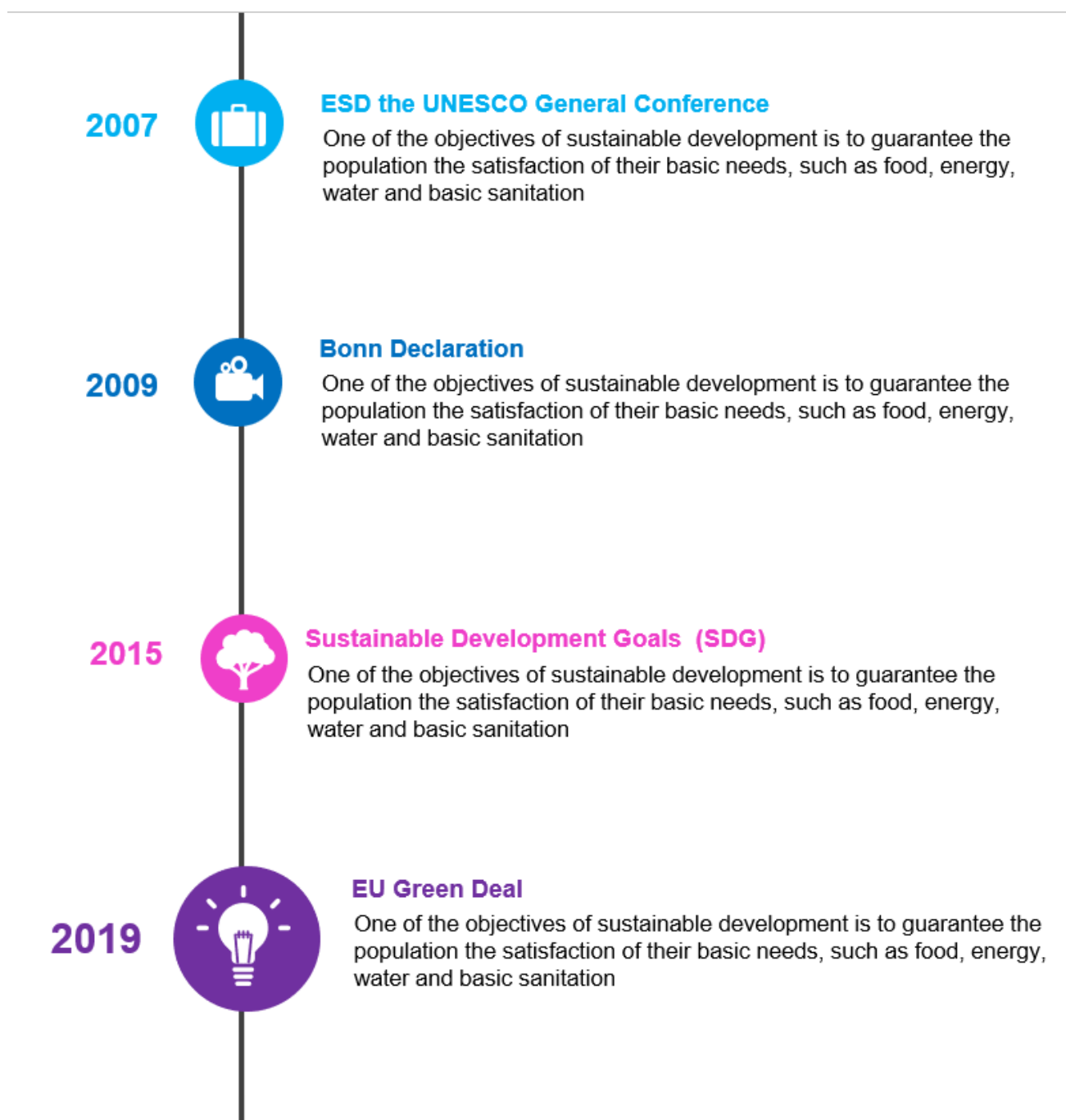


Figure 7. ESD Timeline

5.4 Which EU/UN sustainable policy initiatives are aimed at green strategies for European high education Institutions? Are they truly helping to implement green strategies?

As previously mentioned in the Literature Review, since 1970 the EU together with the UN has been attempting to address issues related to environmental damage.

HEIs have also felt the need to fight against climate change and contribute to a more climate-friendly planet. However, it is still not clear which guidelines/initiatives the institutions should follow. Therefore, six subjects who are currently working in the GO of universities were interviewed. Additionally, two sustainability consultants from Ecomatters and one subject who is currently working as a sustainability advisor at Goodrise and worked in a GO before. Considering that the HEI in which they are employed are in different continents, the reader is provided with a broad understanding of the contemporary frameworks that have successfully been implemented worldwide.

Soam, a former staff member of the GO in LEI was surprised with the EU Green Deal, because it does not have education goals, in the sense that it does not provide strategies specifically created for education institutions. Yet, he does not believe that such a policy would work in practice. If the EU would create an EU sustainability policy addressed to HEI, it would be frowned upon and create resistance not only among students but also among staff members. He explains that the culture of LEI (and he believes many other universities as well) have a more 'people are responsible and have the freedom to decide themselves whatever they want to study' mindset.

Furthermore, Soam says the SDG is the main framework for LEI and he shares an interesting remark about it. During a student survey on the topic of sustainability, students were asked to identify the five most important SDGs for them. Many of the respondents chose Climate Action (13), Responsible Consumption and Production (12), and Life on Land (15) (Zeijlmans, 2021). This shows that many pupils do comprehend the importance of this topic.

On the other hand, Pau a former master's degree student at Delf University & LEI, believes that directives related to energy efficiency could easily be useful when setting up targets/goals in the sustainable plan of the universities. Perhaps not necessarily aiming at sustainability, however, it can result in a significant impact on the overall sustainability performance of the institution. Pau also believes that the SDG framework would suit universities best (Ferran, 2021).

Irene, the GO coordinator of the University of Groningen, considers the SDG an effective way to divide sustainability into smaller blocks, which facilitates the creation of a Sustainable Plan. Moreover, she thinks that such a framework is convenient for both universities that are "advanced" in the sustainable journey as well as the beginners. (Maltagliati, 2021).

Eleri, the sustainability coordinator of the University of Victoria, does not work with any EU framework, since she resides and works in Canada. Nevertheless, Eleri emphasizes that the SDG is a framework the university uses when it comes to international scale guidelines, together with the IPCC reports on climate change. According to Eleri, these two frameworks “lead to inspiring innovation for the university”. Additionally, UVic has also implemented federally driven policies (Davies, 2021).

Corey, a current staff member of the GO at the University of Tasmania (UTAS), acknowledges that the SDG is by far the preferable framework UTAS follows. However, Corey and his colleagues were wondering how they could assess and rate the university’s performance. The GO team decided to use the STARS and THEWUR assessments. These two were chosen because they meet the university’s needs and act as a behavior change engagement tool (Peterson, 2021).

Rodrigo, a current staff member of the GO in VU, mentions the EU Green Deal as the most popular one existing, even though there were some setbacks due to the COVID-19 pandemic. The SDG is also the preferable framework (Zapata, 2021).

As opposed to one of the other interviewees, the Environmental Law Professor and staff member of the GO at the USP say that policies relating to sustainable mobility have a more significant impact, since they can affect not only education institutions but the local community as a whole. Besides, public policies are more inclusive since they require a joint effort and participation of locals. Consequently, the results can be seen both on and off-campus (Almeida, 2021).

To summarise, the SDG is the initiative most of the interviewees named as the preferable framework universities should follow. And that is because it engages with various societal actors.

5.5 What are the challenges of implementing green strategies in higher education institutions?

A recurring question for organizations that have the desire to be socially and environmentally responsible is "where do we start?". This struggle is perfectly normal, given the proportion of the challenges arising from the effects of climate change. However, the dubiety should not impede action - understanding and facing dilemmas requires initiative, the first one being the self-questioning process itself.

This chapter lists the innumerable challenges HEIs may face when implementing green strategies. The challenges were selected through the testimony of professionals who have been working in an academic setting for a significant length of time.

Corey has been working at UTAS for over a decade. He mentioned that when he started there, back in 2011 there were no recycling bins at the university, which was shocking for him. Corey believes that the concept of environmental compliance is probably the hardest challenge, yet the most effective one. He makes a valid point by saying that since the institution must comply with state and federal regulations, why not turn them into something positive? And perhaps instead of environmental compliance, call it environmental management. According to Corey, from that point onwards, the university board should reflect on how they could decrease their negative impacts and increase their proactiveness, which then leads to environmental sustainability and having a beneficial impact. At this point, he says, they would also notice the financial positive outcomes, such as cost reduction, the realization that the less waste one produces, the fewer costs they have, and so on. The challenge is to bring everyone on board with the assurance that being sustainable equals cost reduction if implemented correctly. (Peterson, 2021).

Joanna and Soam claim that the single biggest challenge is simply the type of institution universities are. Joanna explains that universities are formal institutions, which makes the decision-making process more bureaucratic and slower due to all the formalities and extra administration required usually perceived as an obstacle. Unlike private companies where the CEOs have the liberty to make a decision and put it into action immediately, universities have a harder time when attempting to implement structural changes, since they tend to affect not only students and staff members but also the local community. Reinforcement driven by federal policies could be a solution according to Joanna, however, she is not so sure whether it would motivate students to join in voluntarily or cause an opposite reaction (Zhuravlova, 2021).

Soam emphasizes the idea that decisions within academic spheres (universities) are bottom-up, meaning that if one single professor decides to include sustainability in the course she/he teaches often they are free to do so. Still, many other professors/lecturers would not participate in this

movement. Therefore, if university leaders have the desire to truly implement sustainability into the courses offered, all staff members should be fully committed. Finally, Soam points out that although the SDGs were set up in 2015, there might be a large number of professors who are still not familiar with it “an entire generation of staff that is not incredibly literate on how sustainability relates to their fields” (Zeijlmans, 2021).

Pau believes that the challenge goes beyond hierarchical structures. The difficulty, according to him comes down to changing people’s mindsets. He also remarked on Soem’s regarding the multi-generational staff members. The era we are living in, where new technologies are constantly created/upgraded requires fast movers able to keep up with these everyday changes. Depending on how open and willing to adapt senior professors are, it might be hard to convince them to change their methods and understand the urgency to modernize. Lastly, Pau alleges that there is a necessity for implementing research into the real world to see whether these theories would truly work when put into practice (Ferran, 2021).

For Irene, there are two main problems. The first issue is about how people perceive sustainability; it is still not seen as a priority. She explained that when a new growth strategy is been developed, she has some convincing to do to either staff members from other departments or the board of the university. If internal team members still need to be persuaded, it is difficult to reflect the importance of working towards sustainable development externally as well. When asked if she feels the same resistance from students, she says that most of the students are willing to help and support sustainable actions. However, it is always hard to get everyone on board. Irene shared the remark a student made on one of the surveys where students were asked to rank their willingness to participate in university projects. The person said: “well, we already have so much to do. So, take your tree-hugging mentality and bring it somewhere else”. This again shows the point Irene was trying to make that some individuals still rate sustainability very low when it comes to its importance. The second big problem is the development of sustainable strategies since they are costly and require a great deal of time (Maltagliati, 2021).

UVci is currently developing its ‘Climate & Sustainability Action Plan’ which focuses on integration with academic units, research, and the operational side of the university. Eleri (2021) answered that the challenge they are facing is combining these three matters. The portfolio is intended to meet all the individual units’ goals, which takes longer to conclude since the process is more time- consuming. If she would have to name a challenge in general, It would be securing financial resources. UVic is publicly funded, meaning that they are competing for funding with other departments. Implementing green strategies on a limited budget is extremely difficult and unfortunately a common reality for many HEIs worldwide (Davies, 2021).

Rodrigo, on the other hand, claims that not having a GO puts the university at a major disadvantage. Not having a group of people focused on this matter makes everything more bureaucratic and slower. The biggest challenge, however, is not the lack of a GO but changing people's mindset, both on and off-campus. Explaining such a transition to older staff members and having their support and consent can be challenging sometimes (Zapata, 2021).

For Paulo, the lack of policies to include in the education curriculum is the biggest challenge. He believes that some policies could also engage the local community. Hence the impact would be more significant and go beyond the "university's walls". Paulo says that the USP has benefited hugely from engaging more with the community. Inviting locals to participate in university projects allows them to explain what sustainability entails and creates a partnership that goes beyond formalities/obligations (Almeida, 2021).

5.6 How can the local governments assist higher education institutions to implement green strategies?

The idea of covering public procurement to promote the appreciation of more sustainable purchases and the use of services that are linked to environmental responsibility. Thus, the public power becomes an instrument to protect the environment, in addition to promoting economic and social development (Saha & Paterson, 2008, p. 22).

Often municipalities do have the desire to become more sustainable, however, the lack of experts makes it more challenging to achieve such goal. On the other hand, HEI have students/experts who can conduct good quality research that provides evidence and accurate information. Therefore, Soem believes that investing in partnerships with the local government is highly advised, considering that the theoretical research can be commercialized and create solutions for real-world problems when put into practice (Zeijlmans, 2021).

Paulo and Joanna share the same view as Soem, however, Joanna believes that local governments could take one step further and invest not only on cooperatively projects but also enacting laws and regulations. By doing so, it would enforce sustainable actions and make proposals regarding climate-friendly decisions on campus less bureaucratic (Zhuravlova, 2021). Furthermore, the sustainability consultant also encourages one-time projects, such as a 'Clean-up Day' or workshops to educate the local community.

Likewise, Paulo emphasizes the idea that universities should be in constant contact with the local municipality, as to inform them about new technologies and to propose long-term partnership. The cooperative projects could be either for the university as an institution or single projects for students, such as internships and/or temporary jobs to help them to gain knowledge and work experience (Almeida, 2021).

Pau, on the other hand, thinks the partnership is indeed important in order to align common goals. As mentioned by Soem, universities have many bright students willing to test their research in the real world, therefore, municipalities should take advantage of that. Since universities play an important role as shaping future change-makers, the institution should seek to connect not only with the local municipality but also other HEIs, companies (both from the public and private sector) and encourage students to transfer the knowledge acquired on campus. This would facilitate the achievement of common goals with the most updated research/information, ensure that the goals would be aligned, and finally build long-term successful partnerships (Ferran, 2021).

Eleri from UVci is a vivid example of the point Pau was making about aligning goals. She states that

UVci has a strong relationship with their local government. Whenever they are developing an action plan, they check which types of projects their partners in the municipal governments are dealing with, to align the university strategy on campuses with the whole picture. One of the successful projects UVci has collaborated with the local government is the Campus Cycling Plan. Eleri proudly announced that UVci is the first Canadian university to have a campus cycling plan, thus she highly recommends HEIs to search for potential cooperative projects with their local municipalities. (Davies, 2021).

Mobility is the number one issue Irene presumes municipalities could help HEIs to improve. She stresses that universities can try to motivate staff members and students to commute to campus with transportation means that have a low impact on the environment, such as bikes, carpooling, e-car. However, if the city does not offer sustainable means of transportation to facilitate such, there are not many universities that could do it on their own. Irene thinks the government could assist universities mainly on a structural level. Additionally, she gives a few examples of how the local government could help regarding mobility, for instance, invest heavily on hydrogen or electricity buses, creating places where people can easily park the bikes, and increase the number of rental bikes available on the streets/stations (Maltagliati, 2021).

Corey also encourages HEIs partnership with local governments. If the universities have the facts and figures to show the municipality the demands come from students and are based on academic research, they have higher chances to succeed, considering that the municipality would simply be responding to the needs of our community (Peterson, 2021).

Rodrigo explains that VU has worked on countless projects with the municipality of Amsterdam. The municipality wants to know what the young population of Amsterdam demands, which is easy to find out by surveying the 30.000 students at the university. Furthermore, the university's waste separation is publicly arranged, which facilitates the creation of one-time projects such as clean-ups with students, awareness-raising events, and so on. Rodrigo also encourages the idea of creating a GO at the municipality itself. By doing so, both GOs (universities and municipalities) can push sustainable policies/initiatives forward (Zapata, 2021).

In short, local governments have an important role when it comes to education, research, political training, and the exchange of information necessary for sustainable development to be feasible. HEI should invest in projects that could benefit the community as a whole and investigate the possibilities to start a partnership with local governments.

5.7 The Four Most Sustainable Universities

In this chapter, the four most sustainable HEIs according to the author of this paper (see appendix K “Most Sustainable University Ranking”) will be explained focusing solely on initiatives/programs the universities have successfully implemented to achieve an environmental-friendly campus. First, the two universities in the EU namely the University of Cork (Ireland) and the Vrije Universiteit Amsterdam (Netherlands), subsequently the HEI outside the EU, namely the University of Victoria (Canada) and the University of Tasmania (Australia).

5.7.1 Universities in the EU

5.7.1.1 University of Cork



STAR Report: Gold | Score 66.39

SDG: The institution contributes with the following SDG:



Figure 8.. SDG the UCC (UCC, n.d)

COMMUTING

Car Pooling scheme

UCC's strategy to have fewer cars on-campus parking lot, staff members are stimulated to sign up for the carpooling program. Apart from lower the car rate on the roads/on campus and the financial benefit, the initiative also results in less GHG emissions.

As an attempt to encourage the use of an electric car as well as to accommodate those who already drive an electric car, UCC provides 12 EV12 Electric car charging stations (UCC, n.d)

UCC CampusBike

Since March 2011, UCC has integrated a bike-sharing system on campus available for staff during working hours (UCC, n.d).

ENERGY

UCC works together with Irish Water's Certified Water Steward Programme to developed water-saving programs. Since the partnership has started the university has saved 1,250,000 liters in 4

months.

Replacement of light bulbs to LED and the installation of a car park lighting (externally), are only a few examples out of 22 the university has been carrying out since 2018 (UCC, 2019, p. 14).

FOOD

UCC was the first higher education institution to serve meals prepared with vegetables grown in its own ground. The Waterfall Family takes care of the piece of land and delivers the legumes and vegetables to the university's catering team (UCC, n.d).

Additionally, to raise awareness regarding the negative environmental impact of meat consumption (water waste, CO₂), UCC has joined the "Meatless Mondays" movement in the main campus restaurant. By doing so, staff and students are encouraged to decrease their meat consumption. UCC also offers a wide variety of plant-based meals (UCC, n.d).

WASTE

UCC has also reduced drastically plastic use on campus. The Bio Green Café opened in September 2018 was the first café that did not sell any single-use plastic. So far, it has reduced almost 100% of its waste generation (UCC, 2019, p. 12).

HIGHLIGHTED PROJECTS

Green Week

The initiative was created by universities in Ireland to promote climate actions and educate participants on what sustainability really means. Campuses organize the activities independently, and the events mainly have competitions/quizzes, lectures, and workshops by professionals from different fields who explain how sustainability plays a role in their workplace (UCC, 2021).

ReCircle Container Deposit Return

Staff members and students are able to return their reusable containers from takeaway food and/or lunch boxes. The items are then cleaned and properly recycled. (UCC, 2019, p. 13).

The International Swap Shop

Student-driven action in which students can get rid of items they no longer use. Overall, 90% of the items donated were rescued and the remaining items were brought to second-hand shops (UCC, 2019, p. 13).

Repack Recycling machine

To facilitate and increase recycling rate on campus, UCC installed a recycling machine for tin cans and plastic bottles. Students and staff members also have the chance to win prizes, to incentive the

use of the machine. After inserting the items, the person has the option to scan their phone to sign up for (UCC, 2019, p. 12).

5.7.1.2 Vrije Universiteit Amsterdam



SDG: The institution contributes with the following SDG:



Figure 9. SDG the VU contributes to (VU, n.d)

COMMUTING

With twelve major companies and organizations, one of them being is VU Amsterdam, a covenant has been drawn up in the area of the Zuidas to create the Zuidas accessibility task force. One of these tasks is getting employers to actively reduce the car ratio in these transport movements and with that the rush-hour travel. VU has also signed the Green Deal Zero Emission City Logistics. (Hello Zuidas, 2020).

ENERGY

In order to have a fossil-free campus by 2035, the campus has created an Energy Master Plan and finalized this in 2017. From then until 2021 it will take the first steps to this goal by carrying out the ten subprojects in this plan. One of these steps is implementing a DRUPS system to have an uninterrupted power supply, even when the city's power supply fails (Blue Terra, n.d). The other steps cover renovating and replacing boilers, the operating system, chillers, the demineralized water installation, gas turbines and connecting the new buildings to the new system, and expanding the cable capacity (Vrije Universiteit Facilitaire Organisatie, 2017, p. 22).

FOOD

VU Amsterdam discourages meat consumption with the inclusion of plant-based products along with their Meatless Monday campaign. Moreover, VU aims to make vegan/vegetarian diet standard (VU, n.d).

WASTE

The Zero Waste Zuidas 2030 ambition document, which the VU Amsterdam and 25 other parties in the Zuidas signed aim to be zero-waste by 2030 (VU, n.d).

HIGHLIGHTED PROJECTS

Made Blue & Join the pipe

The Made Blue program encourages students to choose tap water over buying new bottles of water, reducing plastic consumption. The 'a liter for a liter' program converts the water consumption into the same number of liters for developing countries (MADE BLUE, n.d).

The Join the pipe taps on campus improve the same goal and the proceeds of these taps help to organize water projects in developing countries (Join the Pipe, N.D).

BREEAM

As to create a greener campus VU Amsterdam has the desire to strive for an exceptional BREEAM Area Development certification, paying extra attention to heat stress and other extreme weather conditions resulting from climate change. In order to create sustainable cities and communities BREEAM promotes circular use of materials in public spaces (Breeam, n.d).

Green-blue retention roofs VU buildings

Polder roofs also known as green-blue retention roofs on four of the big parts of the VU Amsterdam campus contribute to keeping the city cool. By planting local grasses and herbs, creating ponds, and creating space for wild bee colonies, the roofs of the university contribute to the ecological system and water management. As well as creating a space for education and research, and creating insulation to keep buildings cool in summer, these roofs ensure a great system to retain and delay water during water a shortage in dry periods and drain water to prevent flooding in times of heavy rainfall (VU, 2020).

5.7.2 Universities outside the EU

5.7.2.1 University of Victoria



STAR Report: Gold | Score 80.17 (STARS, 2020, p. 1).

SDG: The institution contributes with the following SDG:



Figure 10. SDG the UVci contributes to (UVic, 2019)

COMMUTING

Campus Cycling Plan

The main goal of the project is to create a bicycle-friendly environment as to increase the percentage of people commuting by bike from/to/on campus, aiming at 10% of the cycling mode share. The transportation goals of UVic, as part of the Campus Plan and the Sustainability Action Plan, also focuses on others means of transportation, for instance carpooling and walking, which ideally would account for 70% of the overall commute percentage to the campus (UVic, 2019, p. 4)

FOOD

Food service and food safety are subjects taken very serious at UVic. The institution aims to provide a remarkable food facility for students and staff, by offering a menu that suits everyone's diet preferences, uses local suppliers' ingredients, reduces waste and provides eco-friendly disposables options such as reusable plates/cups/cutlery in catering, as well as biodegradable straws and containers. Additionally, the campus also serves 100% Fair Trade coffee and tea, organic food and sustainable Ocean Wise seafood (UVic, n.d)

WASTE

UVic is proud to state that over 75% of the waste generated every day on-campus is redirected through recycling means, composting initiatives, and educational programs. Furthermore, the institution provides both indoors and outdoors waste separation systems across campus. The core

goal is to become a zero-waste university by the end of 2021 (UVic, n.d).

HIGHLIGHTED PROJECTS

Campus Greenway

As a way to offer an environment that would enhance UVic students, staff members and visitors interactivity, the UVic university is currently working on a project so-called “Campus Greenway”.

The primary goal is to create a pathway between two buildings, however, the university has decided to make this 1.1 km-long path a place where everyone can feel more connected to natural and ultimately encourage respect with Indigenous communities (UVic, n.d).

UVic Recyclepedia

To assure that students and staff members are not only educated about items that are not accepted in the standard waste separation bins across campus, but also to encourage them to recycle correctly, UVic offers the Recyclepedia tool. The operational program has a search bar in each one can type the item they desire to dispose, check if it is recycling or not and use the link to acquire information about where/how to dispose specific item responsibly (UVic, n.d).

^ Item	Waste stream
Computer mouse	Recycle

Figure 11. UVic Recyclepedia tool (UVic, n.d)

5.7.2.2 University of Tasmania



STAR Report: Silver | Score 50.94 (STARS, 2020)

SDG: The institution contributes with the following SDG:



Figure 12. SDG UTAS contributes to

COMMUTING

By working together with companies like Flexcar and Metro Tasmania, installing electric car and bicycle charging stations, creating bike lockers and the possibility of 'virtual transport', UTAS encourages everyone that travels to their university to think about sustainable transport and not rely on single occupant vehicles to reduce greenhouse gas emissions (UTAS, n.d).

ENERGY

As the second university certified as carbon neutral in Australia, UTAS is constantly looking for ways to reduce their greenhouse gas emission and energy consumption costs using their University's Energy Strategic Plan. This includes a commitment on monitoring, evaluating and reporting data to check for efficient use of energy, develop and implement procedures and policies to reduce the energy consumption and liaising with energy retail companies.

Initiatives done to reduce the energy consumption are for example installing solar electric and hot water systems, changing to LED lighting systems and replacing current LPG and diesel fuel sources with natural gas.

Aside from that they encourage University staff and students to get involved and participate in energy challenges and competitions and taking simple action like turning off lights, computer and printers, reducing the heating by one degree Celsius in winter and saving energy in laboratory freezers where possible by using the highest temperature possible (UTAS, n.d).

FOOD

To improve food security, increase local food production and reduce food miles UTAS works together with staff and students by giving them access to fresh, local and nutritious products on all the UTAS

campuses. One way of providing is food and herb gardens, individual plots and communal gardens located near the campuses. Another is the Cradle Coast Campus, which contains a small vegetable garden setup to promote farm-bot technologies, now in use to teach university students to grow their vegetables and Education students on how to teach school children about using food gardens in the future. The Maker's Workshop contains some special plants grown for paper production and the Rural Clinic School has special food gardens for medical students (UTAS, n.d).

WASTE

The university provides an "Clean out and Disposal Process Guide" e-version brochure to guide students on how to dispose of items that do not belong to the standard 4-bin waste separation (UTAS, 2020).

HIGHLIGHTED PROJECTS

SIPS Projects

SIPS is an award-winning program bringing operational sustainability outcomes together with student education and experience. UTAS created this with two goals: allow students to apply their learning to actual global sustainability challenges taking place today and assist UTAS to have a positive worldwide impact environmentally and be the front runner of sustainable campus management (UTAS, n.d). For example, student Ellen-Rose Sorensen created the Sustainability @ UTAS podcast where she talks about sustainability (Rose, n.d).

Re-use Program

As a big university, UTAS ends up with many pieces of unwanted furniture possible to be reused. For this specific reason they created the Re-Use Program, a program for University staff of all campuses to register furniture to use within the university, find furniture listed, claim it or request them (UTAS, n.d)

Green Impact Program

The program requires a joint effort between students and staff members. Participants can sign up as a team or individual, choose the toolkit they would like to join, divide the roles, upload their initiatives/activities, and attend the final ceremony (UTAS, n.d).

6. Analysis

This chapter provides an analysis of the content presented in the results chapter.

Firstly, the definition of sustainability stated in the Brundtland report has not undergone a substantial change since 1987 when it was written. If compared to the contemporary conceptualization given by the interviewees, the multi-generational aspect is still present, meaning the idea of satisfying the needs of our current generation in a way that does not compromise the chances of future ones to do so. Furthermore, subjects expressed the need to add the concept of long-term actions when characterizing what sustainability entails.

Secondly, only one interviewee (Corey) warned individuals for the overuse/misuse of the word "green" as a false synonym for sustainability, the famous "greenwashing". The term was expected to be mentioned when interviewees were asked what GS are, however, it was not. On the other hand, most of the interviewees seemed to agree on a definition for the term 'green strategy', being strategies contributing directly or indirectly to environmental sustainability.

Additionally, all interviewees believe that abiding by the SDGs is the most suitable framework for HEIs. The unanimity also applies to the questions related to HEIs and partnerships with the local government, being all in favor of such a cooperation.

Finally, the question with more discrepancy was related to the challenges the HEIs face when implementing GS. Rodrigo stresses that not having a GO is a major disadvantage for the HEI. However, the biggest challenge is to change people's mindsets, to which Corey agrees. Irene mentions something in line with what Rodrigo and Corey said, she believes sustainability is not yet perceived as a priority. She also states that GSs are costly, which contradicts what Corey alleges that correctly implemented sustainable actions equal-cost reduction.

7. Conclusions

To conclude, this research report aims to answer the central question “What are the critical success factors for higher education institutions when implementing a green strategy?” by using qualitative research methods (interviews) and desk research. It can be said that there are 5 main critical success factors for HEIs when implementing a green strategy:

- 1) Establish a Green Office;
- 2) Create a Sustainable Action Plan;
- 3) Execute Sustainable Action Plan;
- 4) Monitor & Evaluate;
- 5) Report & Inform.

Becoming sustainable requires commitment, cooperation, and long-term planning. With the considerable number of articles, news, documentaries, and political discussions on environmental issues, adopting eco-friendly strategies is not an option anymore but a must. To that end, this guideline should assist most of the HEIs, considering that it is appropriate for universities that are leading in terms of sustainable development, as well as HEIs with a very low level of maturity in sustainability.

8. Recommendations

The goal of this dissertation is to identify the critical success factors for higher educationa institutions when implementing a green strategy. Having analyzed GSs that HEIs worldwide are currently using, the author of this paper has gathered the findings and created an Eco-friendly Guideline containing 5 broad steps organizations aspiring to become more sustainable are encouraged to follow. Written next to the step, one can see the name(s) of the HEI(s) that has implemented the strategy.

8.1 Establish a Green Office

As pointed out by Rodrigo (VU), having an appropriate physical space where both staff members and students are allowed to share ideas and work on sustainable projects, not only motivates others to join but also shows that the institution is genuinely concerned about environmental causes.

8.2 Create a Sustainable Action Plan

Eleri explained that before implementing structural changes institutions should identify what needs to be improved, what is missing, and what their priorities are. Once clear goals are set, creating a Sustainable Action Plan helps the organization to keep track of its performance. Additionally, the goals should be aligned with a sustainable framework, such as the Paris Agreement, Doughnut model, or the SDG which seem to be the favorite one amongst the interviewees.

8.3 Execute Sustainable Action Plan

The execution phase determines whether the SAP is suitable for the HEI or if it needs some adjustments. Some level of flexibility might be required, considering that things might not go according to plan. Bear in mind what Irene and Eleri mentioned regarding the development of a sustainable portfolio; the process is time-consuming and according to Irene, costly as well.

8.4 Monitor & Evaluate

As Zeijlmans said, assessing institutions' performance is crucial. It provides a clear overview of the next steps, it helps to check whether the institution is on the right track, and finally, it shows which areas should be improved and how.

- Conduct an audit - All four HEIs
- Survey students/staff members - All four HEIs

8.5 Report & Inform

All the four HEIs provide an annual report in which the performance of the institutions is explained, including coherent figures and facts, and that is because transparency and accountability are strong characteristics HEIs should have. It not only allows them to gain public trust but also encourages

other individuals to join the sustainable movement.

- Develop (monthly/annual) reports to show the progress with facts and figures and update your plan with new insights - All four HEIs
- Social Media for Sustainability Communication – VU

6 Steps to implement Eco-friendly Guideline:

8.2.1 ESD FOR STAFF MEMBERS & STUDENTS

- Train staff members – UTAS, UV & UVci
- Implement student-led initiatives - UTAS

8.2.2 COMMUTING

- Cycling Plan - UVci & UTAS
- Carpooling All four HEIs

8.2.3 FOOD

- Meatless Mondays – VU & UCC
- Offer vegetarian/vegan options - All four HEIs

8.2.4 ENERGY

- Change to the LED lighting system - All four HEIs
- Reduce the heating by one degree Celsius in winter - UTAS

8.2.5 WASTE

- Provide 5-bins waste separation (glass, paper, plastic/aluminum cans, organic waste) - All four HEIs
- Ban single-use plastic from the canteens/cafés/coffee machines - UCC

8.2.6 PROJECTS IDEAS

- Implement student-led initiatives
- Install Ecosia as the search engine in the computers around campus - VU
- Green Week - UCC
- Swap Shop – UCC & UTAS

See appendix M. “Information about each step of the Sustainable Action Plan” which justifies the steps chosen.

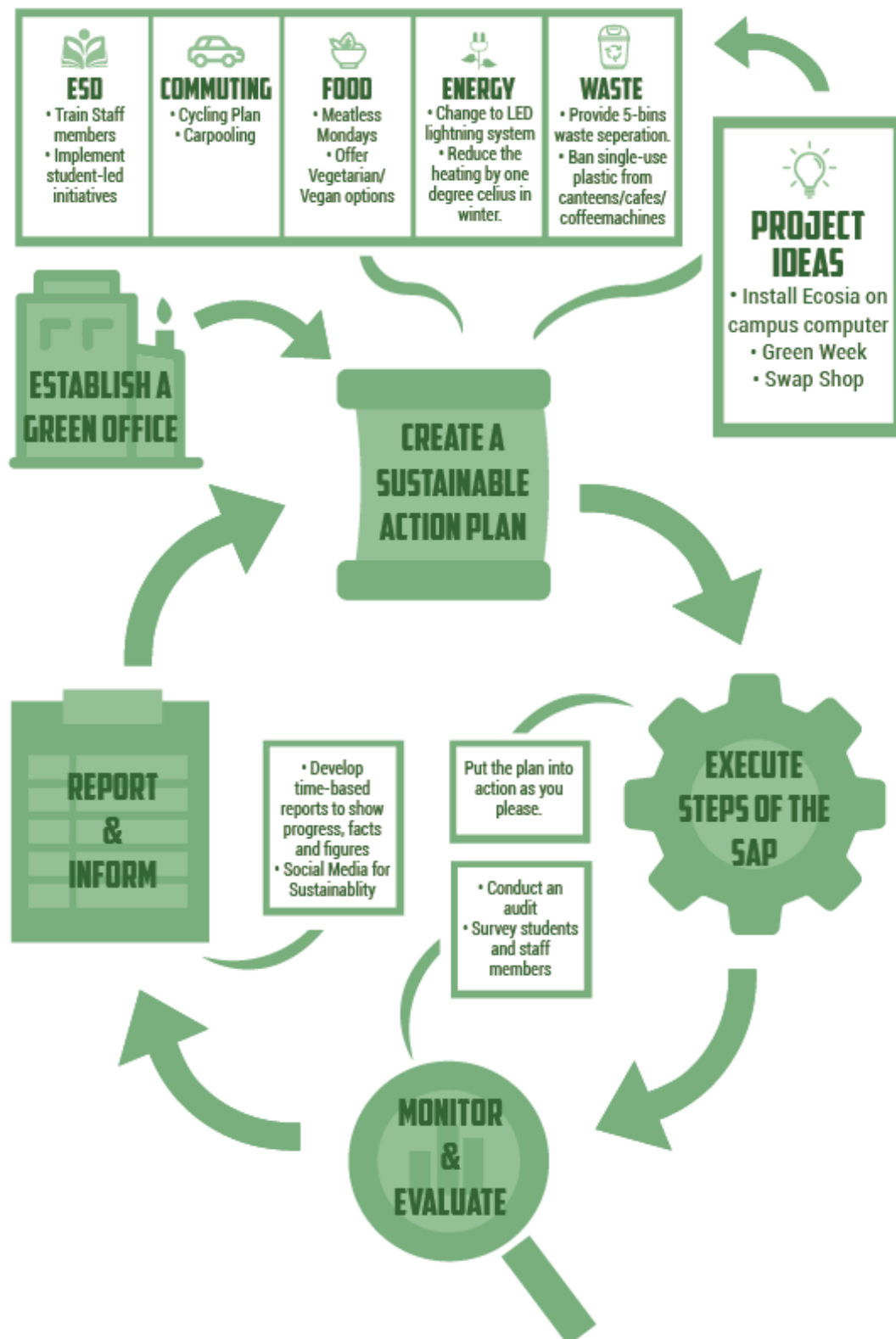


Figure 13. Eco-friendly Guideline (Silva & Hageman, 2021)

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10. Appendices

Appendix A. Student Ethics Form



European Studies Student Ethics Form

Your name: Jheny Milany Diniz Silva

Supervisor: Pieter Pijlman

Instructions:

Before completing this form you should read the APA Ethics Code (<http://www.apa.org/ethics/code/index.aspx>). If you are planning research with human subjects, you should also look at the sample consent form available in the Final Project and Dissertation Guide.

- Read section 2 that your supervisor will have to sign. Make sure that you cover all these issues in section 1.
- Complete section 1 and, if you are using human subjects, section 2, of this form, and sign it.
- Ask your project supervisor to read these sections (and the draft consent form if you have one) and ask him/her to sign the form.
- Always append this signed form as an appendix to your dissertation. This is a knock-out criterium; if not included the Final Project/Dissertation is awarded an NVD.

Section 1. Project Outline (to be completed by student)

(i) Title of Project: Sustainability in higher educational institutions

(ii) Aims of project:

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy. This guideline will take into account the initiatives proposed by the EU Green Deal and will also be based on sustainable actions that environmental-friendly higher educational institutions have successfully implemented.

(iii) Will you involve other people in your project – e.g. via formal or informal interviews, group discussions, questionnaires, internet surveys etc. (Note: if you are using data that has already been collected by another researcher – e.g. recordings or transcripts of conversations given to you by your supervisor, you should answer 'NO' to this question.)

Yes ☐

If yes: you should complete the section 2 of this form.

If no: you should now sign the statement below and return the form to your supervisor. You have completed this form.

This project is not designed to include research with human subjects. I understand that I do not have ethical clearance to interview people (formally or informally) about the topic of my research, to carry out internet research (e.g. on chat rooms or discussion boards) or in any other way to use people as subjects in my research.

Student's signature Jheny Milany Diniz Silva

Date 18/12/2020

Section 2 Complete this section only if you answered YES to question (iii) above.

(i) What will the participants have to do? (v. brief outline of procedure):

The participants have to answer the ten questions, give me the permission to record the meeting, use the information obtained during the conversation for the research, and ideally allow me to include some personal information in the research, such as: job title, academic background, nationality and so on.

This research will utilize data following a semi-structured interviews style. I will create a list containing 10 questions as a guideline, mainly focusing on the green strategies, and extra questions may emerge along the conversation, these extra questions may vary from interviewee to interviewee.

(ii) What sort of people will the participants be and how will they be recruited?

A deliberate sampling will be used, in order to select the ten interviewees.

This method was chosen considering that "the researcher actively selects the most productive sample to answer the research question" (Marshall, 1996, p. 523).

I will start by contacting people from the strategic partners of THUAS, because I believe it would be easier, considering that the connection is already established. Moreover, the THUAS partnership includes universities from both inside and outside the EU, which is the variety I need.

Additionally, a certain number of interviewees will be selected later, based on the four higher educational institutions chosen.

(iii) What sort of stimuli or materials will your participants be exposed to? Tick the appropriate boxes and then state what they are in the space below

<input type="checkbox"/>	Questionnaires	
<input type="checkbox"/>	Pictures	
<input type="checkbox"/>	Sounds	
<input type="checkbox"/>	Words	
<input checked="" type="checkbox"/>	Other	Formal/informal interviews

(iv) Consent: Informed consent must be obtained for all participants before they take part in your project. By means of an informed consent form you should state what participants will be doing, drawing attention to anything they could conceivably object to subsequently. You should also state how they can withdraw from the study at any time and the measures you are taking to ensure the confidentiality of data. A standard informed consent form is available in the Dissertation Manual. Appendix the Informed Consent Form to your Final Project/Dissertation as well.

(vi) What procedures will you follow in order to guarantee the confidentiality of participants' data?

The interviewees will be asked to read and signed the "Informed Consent Form" which states the following:

"All that all information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed,

anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

Student's signature: Jheny Milany Diniz Silva

Date 18/12/2020

Supervisor's signature:



Date 15/02/2021

(if satisfied with the proposed procedures)

B. Soemano Zeijlmans Interview**(i) Informed Consent Form****Informed Consent Form****Informed Consent Form**

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

The interviewee has allowed me to include the following information on the interview report:

Nationality
Job title
Academic background

The interviewee has allowed me to record the interview

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: Soemano Zeijlmans

Signature:

Date: 10 March 2021

(ii) Interview Transcript

Goodrise – Advise and Training

Name: Soem Zeijlmans

Nationality: Dutch

Job title: Green office trainer & sustainability consultant

Academic Background: Bachelor of Liberal Arts and Sciences Global Challenges;

S = Soemano & J = Jheny

J: We are recording now. Yes, so if you could first introduce yourself. Yeah. And just explain what you studied and what are you currently doing as job wise, please?

S: Okay. So, I studied a fancy program called “Liberal Arts and Sciences Global Challenges”, but what it basically comes down to is that it's a very interdisciplinary program where I did my major, so my like specialization in governance, economics, and developments. So basically, what rules needs to be to which outcomes, what is the most efficient or most effective way to reach your policy goals, etc. And I did a minor in sustainability. Yeah, and during my studies, I found out about the green Office of our university, Leiden university green office, which I can spend an entire interview trying to describe, because we don't always even know that ourselves, what we really are. But how I saw it was basically this is the like the students run sustainability departments of Leiden University. And I thought it was really cool, and I want to use basically my background in reaching policy goals and so on and, and lobbying, etc, which I found really cool for sustainability. So, I started, I joined that organization, or that departments to basically reduce the environmental footprint of the university. And during the first year that I worked there, that was all part time, by the way, eight hours per week. And I also started to realize how important like, integrating sustainability in education was. So, I started to put some attention on that as well, because we didn't really have anyone in the team, on that, like portfolio. And then at the end of the first year that I worked there, I just asked for new positions to be created for getting sustainability into like the university strategies, because there's a lot of bureaucracy involved, we can like, put sustainability in there. And then with the idea of has some spin off effects, and to get it in the education of the university. So that's what I spent the last half year on. And yeah, even though I wasn't an student anymore, and now in February, I quit, and I started my own consultancy company also for sustainability, and also sometimes education related.

J: Okay, and before starting a degree where you're very interested in sustainability, or it came within the studies in the minor that you did?

S: No, I was already interested in it but perhaps so in a different sense, you know, whereas, of course, like, my study was very economics and policy based, etc. It was, of course, that during that

study, I got interested in environmental policy and environmental economics, and like the structural change is needed for sustainability. Before that, I was also interested in that, but the emphasis was more on what like people individually could do, which sometimes now bothers me when I really look at the conversation is how little the conversations going around structural and, and policy impacts.

J: Okay. And during your studies, and also when you're working in the green office, which projects did you have? Were they more projects within the office or did you also include to the students?

S: So yeah, this is a ton of different projects, because I'm always the type of person who works like 10 different things at once. But yeah, to highlight a few; the university was making a new sustainability vision, which my colleagues, before I joined to green office, my former colleague started a petition from Leiden university students and staff saying: "Hey, Leiden University, we should really put like, sustainability related stuff as the core of our business operations in our education and in our research. So, you need to write a sustainability efficient and put it in your strategic plan". So, I wasn't involved with that, but I did kind of like get the results of the petition was like, hey, go lobby this. So, the university actually did stuff making sustainability vision that I, well, I could go authored the draft of that, and that was one thing. I also started like relations with the facilities department of the university, and that was more on a practical level to reduce the amount of coffee cups that are being thrown away. But this is such an endless discussion, it goes on and on and on, and every time we think we found a solution, there's new practical problem. Maybe you heard about, like the bamboo coffee cups that have melamine in them. So, we ordered like a bunch of them, now we can sell them, but so this always, always, always goes on.

J: Okay, that's very interesting. Now I'm gonna jump into the research questions. So, the first one is how would you describe sustainability or what sustainability means to you, when you think of the word?

S: Yeah, so if you'd asked me to define it, like, super conceptually, I would say it's just to be able to continue prospering both in the short and the long-term, with emphasis on long-term. So, whatever you're doing now doesn't hurt your like future abilities to do anything else. But what it practically comes down to is, like, what I like more emotionally associated with the word is like, the environments so like a very, like green type of sustainability. Which basically comes down to no pollution, carbon neutrality. Well, yeah, things like that. So basically, it much more in the environmental realm of the word.

J: Yeah. Yeah. Okay. Thank you. Second question is about green strategies. So, what do you think would be the definition of green strategies? And you can do more or less like you did with sustainability. Yeah, the definition and then what do you think "emotionally" should be the green strategies?

S: So, the green strategies of, of what?

J: In general when you think of the word green strategy

S: Okay...

J: Do you think more, yeah, you could also give me some examples of green strategies that you have you worked with? Within the green office or elsewhere.

S: Yeah. Okay. Yeah. So, what I would say is a green strategy is basically be like, a plan that gets you from being not sustainable to being sustainable. So, think for example, the sustainability vision of the university that I worked at, I would, I would call that a green strategy because it outlines like the sustainability goals and mission of the organization. But also, something like the climate agreement “Klimaatakkoord” in the Netherlands, would also outlines goals, and in some extent, how to get there, so, I would call that a green strategy as well. And the European Union, the EU Green Deal, also called green strategy. But I must say, it's not really a word I encounter a lot. I mean, I know what green means and I know what strategy means, so that's why I can guess but I don't see really see the word green strategy is a lot when I'm work or anything.

J: Okay, I have a different impression, because I feel like nowadays most of the companies and universities, they like to give this title “green strategies”, so then they they sound more “environmental” they sound more “sustainable”, and then when you actually read the strategy, it doesn't sound that green, which is there green washing again. Yeah. So it's nice to talk about that. The third question has to do with something that you already mentioned, for example, the EU Green Deal. So, I want you to, I don't know if you're, if you can mention strategies of the United Nations or the European Union, and also other strategies that are more global, than you think that they could help higher education universities, because the impression that I have is that the green, green deal is that is more focused on companies, and there's some guidance for the government, but there are no real clear guidelines for higher education universities. So maybe I'm missing something there.

S: I'll take you one step further. I didn't even know that there are sustainability that there are education goals in the Green New Deal, at least not for for higher education institutions, so that struck me by surprise as well. At least by the time that I worked at Leiden University, we never discussed that “oh, but the European Union wants this or we can get a subsidy from the EU if we do this”. No, that was that was never discussed.

J: No, and that's my point there, there are no green, there are no sustainable strategies or anything that is aimed to universities. So that's why I was thinking if there's already policies or initiatives that

we could implement in the universities. But the thing is that they don't really have anything for, yeah, higher education universities.

S: Ah, okay. Yeah. Because I'm also thinking that, okay, what if there was like the EU sustainability policy around higher education that says, like, that “all university should like, teach something about sustainability or start new bachelors program about sustainability”. I don't think universities would like it if they did that, because, at least the culture of my university was like, yeah, “the people who are responsible for like program decide themselves what they want to do”. So, they don't like it. If even said, like, a green office says like “Oh, you should start a new bachelor's program”, or if the university council says “Oh, you should start a new bachelor's program”, because it's all decided on a very, like, low governance level. So, I can't imagine like, what would happen if the European Union says that “you should start a new bachelor's program” or change the contents of courses I think it will be a lot of resistance.

J: Yeah. Especially for countries that are not economically on the same level as the Netherlands and Germany and the countries that are better economically, I think there'll be also very hard for them.

S: Yeah. But even regardless of that, it's just that this thing of academic feed is that the organizations just don't like other, like higher level entities getting involved in what they do.

J: Yeah, that's true. When I think about the sustainable policies, or initiatives, I can only think of the Sustainable Development Goals. Yes, I think that's the one that most of the universities trying to implement at least three or four. I don't know if you agree with that. But I guess that's the only one that universities can sort of implement.

S: Yeah, this kind of like this “easy-go-to thing” as “Oh, what do you mean by sustainability?” And then like, the very easy one to say is that, “oh, just the Sustainable Development Goals”. Maybe it interests you, in back when I worked for the university, we had this discussion for a while. Also, because we wanted to better like measure how much sustainability is really in our education, and what kind of goals should be set if we are your writing strategy. And that's, in all the years that we've been doing sustainability policy, no one has really defined sustainability in our organization. So everyone says different, different definitions of sustainability. We did a student survey asking about sustainability in which we didn't define sustainability ourselves, but we asked students to define sustainability for us. And just like the the range of definitions, goes, goes all the way. Some people even said economic growth, which sounds very confusing. We also ask them to, like identify the five most important SDGs for them. And there it shows that most students find like the environmental SDGs to Climate Action, Responsible Consumption, Life on land, they find these typically the most important.

J: Oh, that is interesting.

S: Yeah, intuitively for me, that's also correct, because I feel like me, I myself, associated sustainability mostly with environmental goals. And I think most of like students that I know also do this.

J: Yeah, that's true. Then what do you think would be the biggest challenge that universities have when they want to implement green strategies, or when, like you said, they want to change their business plan. And, you know?

S: If you're talking about like, putting it in the education of the education institution, so like in the curriculum, I think this, like, how universities are governed, is the single biggest challenge. Because you can, you could say that, okay, every course or every book should do something about sustainability, but there is no one really in the university that decides on that. Basically, it's its bottom up, right. So, if one specific professor wants to put something around sustainability in the course that he is creating, yeah, then he's, he's very often free to do so. But you should always also imagine that there are thousands, thousands of professors at these education institutions. So, if you want to do like a true makeover, that way, you would have to contact like thousands of, of professors and talk with them about, like the potential that they could have in education for sustainability. Not to say that there are many, many instructors that don't really know anything about how their fields relates to sustainability, because the, like Sustainable Development Goals came out like, I don't know, like a decadeish ago. So there are there are tons of professors that don't even know what the Sustainable Development Goals are, just to give an example. So, we have an entire generation of staff that is not incredibly literate on how sustainability relates to their fields. That either they don't they are not, or they think they are not, even though they would have all that the necessary requirements. Yeah. Yeah, so that is one. But if you would do a top down, you would run into the same issues that if say, a faculty board, or broker board says, like, "oh, we're gonna do this", and then professors say, like, "no, I'll decide myself what I'll teach in my courses". So, you're gonna run into a lot of resistance, and even if you would make it mandatory, you would, people would integrate it because they have to integrate it, you can put some question marks around like the quality of that education. So I don't think it's like, I've always, I always been surprised that how many people, like in the university, when you talk to them are like, super passionate about sustainability, and are always looking to get action. And then when I started my job, I was always like, "oh, it's my job to convince like these boards and and the university council, etc, about how important this topic is". And yeah, of course, there's something to be done there, but it's also us and they just don't really know what they can do with this topic. Because it's not like in any like, normal company, when the like the the executive board set

the top of everything. The the Executive Board of university, just make sure the university is run well, and that's basically their task.

J: What if when it comes to the structure of the university, so let's say, simple, for instance, just implementing the recycling bins or changing the lights that they turn off automatically change the cutlery to the Bamboo, or the wood ones that are the plastic, do you think those changes would be easier or there would be challenges while implementing those.

S: No, yes, definitely. Much, much easier. In my experience, at least, but also, if you like, take a look at sustainability rankings and see like what's university score a lot of points on this. And because that's basically like any other company can do; changing lightbulbs is, is such a marginal thing that any organization or any company can easily do. And especially the bigger ones, they would even have like the the brains and the people working on there to, for example, like come up with very efficient logistics solutions. If you need to transport like books, or other learning materials between Leiden and The Hague everyday, because that's why our two campuses are. Well, you can of course, like, do a lot of like interesting calculations on what's the most efficient way to do this by electric vans, etc. But, yeah, that's not so much a university governance issue as much as it's, it has kind of like I would imagine the same, yeah, issues that any company would have in reducing their carbon emissions.

J: I think the main issue is also like you said, there was more changes, they're quite easy, but I think the main challenge is to change people's mindset, because we can implement all those tricks and yeah, and ways to make people become more sustainable, but some people just do it because they have to do it, or others do it without knowing the point of, of, you know, like, trying those changes. So, I think the main goal would be to change actually the mindset and I think that's where the challenge lays.

S: Yeah, I'm not sure if I 100% agree with that, because yes, yeah, of course, it's important to change people's mindset. But in the end, as I feel like, as long as people behave sustainably, I don't really care why they behave sustainably. Are you still there because your audio drops?

J: Oh, yeah, yeah, yeah, I am here.

S: Okay. So, I was saying I, I don't really care why they behave sustainability as long as they do. Say like, if if you take the bike everyday to the university, if you're a staff member, instead of the car, I don't care whether that is because you are very passionate about sustainability or want to bike, or because it's simply the most convenient option to get to the university. I think in the end, what matters is that people take you back to the university. So, if you're able to do this by giving, like traveling compensation, or like, what you call this, a commuting, like, subsidy for commuting, there's a lot of organizations give, if you give that not only to people who have to pay for petrol, but also for people

give a bike and for example, pay for their bike, pay for bike maintenance, or pay their public transport card. While these are all things that any company could do, and most of them also do, by the way, but just to illustrate. Well, that's a, that's a very good way, I think, to reduce the environmental footprint of your organization. And that doesn't even require that all your employees or all your students are like super sustainability passionates. And I think this is in the end where you can create a lot of, yeah, we can really, like, advance your sustainability efforts. Because I think it's a very unrealistic goal to think that like the the the ten thousand or, perhaps one hundred thousand people that are related to your organization, are all going to intrinsically so be so motivated to act in a very sustainable manner. That's an incredibly important thing to realize, because you have to rewire everyone's brains. Basically, that's that's a huge challenge.

J: But then, don't you think that those people are only going to be sustainable in the workplace, and then when they come back home, they don't even do anything? I know, it's already something because any effort counts. But then it would be interesting to “rewire” their brains and educate them. I think that's very hard.

S: Yeah, yeah, there's something to be to be said for that, of course. But personally, I feel like if you, like change sustainability policies within your organizations or in government, that's for all the time you invest in sustainability in your organization, this is eventually going to be more worthwhile. And you know, perhaps it can have some positive spill-over effects as well, if you motivate people to bike to work every day, and that they start to love biking. And since they have a very well working bike that they started bike elsewhere as well. No, that's all that's all possible.

J: Yeah. That's very true. When it comes to the local government, how they think they could assist universities to become sustainable, or with their green strategies? With subsidies or...?

S: Yeah, so like, business operations wise, will be helpful to just I think, have some space to be able to even yeah, try to achieve the goals you want. So, like be a bit lenient when you're trying to file for the possibility of installing solar panels. That will be helpful.

What they could also do, I know that there are some partnerships between the municipality of Leiden and Leiden university to work on projects together, such as Leiden University, they are partnering with several organizations. I don't know which one exactly, but also the municipality and they're trying to make the city of Leiden greener, so more biodiverse. And, well, the the municipality is, of course, like executing the goals and has the final say in what happens in the public space. But the there are professors and I think biology students who are often taken involved in the project on basically the knowledge side of this, so “which shrubbery do you want to place?”, “where to get most benefits and what are the possibilities?” “What is the academic literature say?” I think that these relations now, these partnerships are very important to create. Because on the one hand, you have a municipality that wants to be more sustainable, but they don't have the experts to really know how

to, the university has the expertise, but they don't have a municipality to to change. And yeah, if you're teaching your students about biodiversity and and urban, urban green spaces, you might as well use this information for the better, right? That's why I'm thinking.

J: Okay, that makes sense. The question number seven, I believe you're already answered when we talk about the most difficult step to implement green strategies in the university. I think you're over quite well, the business side. And yeah, the other side and question eight about is more costly changes that you think universities could implement in the short term. And first, I'd like to know your opinion, because a lot of people would disagree that a lot of people thinks that to short term changes are not worth trying, because as the name says, it's just the short term. So, it's better to invest in a plan and then take some time and effort and think for two, three years and then use as a long-term plan.

S: No, it's I think one doesn't really exclude the other, right? You can create, like, a strategy to totally do an overhaul of your organization, and still be involved in these smaller changes. To give you an analogy, my sister recently moved to her house, she's a lot older than me, she now owns a house. And they're trying to make their house as sustainable as possible. So, it's super well insulated, they have put solar panels on the roof, that they still use incandescent light bulbs in their house. Well, I think this is a very good example of your you can work on all the big projects. But if you also don't really do like the, if you don't pick the low hanging fruit as well, yeah, it's still gonna be there on the tree. So yeah, of course, also, universities should change all their light bulbs to led or, or similar lighting options. Yeah, but yeah, it should also of course, not distract from the real bigger things you should do.

J: Yeah! And can you think of other examples that are not so costly that universities could implement straight away? The lights? And most of the universities already, I believe have the recycled bins for paper plastic, etc. So, other changes along those lines?

S: I think, for example, parking? Well, if you have a, if you need to pay like an annual or a monthly fee, and with that fee, you can park as much as you like on university parking grounds, you might as well change that to being third time you park at university. And that can be a lower amount. As in, you don't really you don't even need to change the amount of revenue the parking fee creates. But this is such a simple change that now for every time someone parks, they have to think "oh, is it worth paying the extra fee in order to park at the university parking grounds or is it perhaps a better option to take public transport. And if you already pay for this in advance for a year or a month, you don't really have to factor that in you, because you have paid for it anyway, regardless of whether you're parked there or not, so then you are going to park course, at the university grounds. But I

think that is also like, an example of many things that a university but also any other organizations could do to reduce this impacts.

J: Yeah. That's a good example. When it comes to the movement of students within the green strategies, how do you think universities could get the students more involved within the strategies if they want to?

S: I am the living embodiment of that I think, haha. So yeah, green offices are good one. So that it's like the students run the sustainability departments. And one caveat though, is even as you green office should be critical what projects you want to do or not wants to do, so it only invest your time once. So, I think should invest in like these very high impact projects that really change university. But other examples are at least in like, in like the research universities in the Netherlands, there's a very strong system of co- participation. So, for study program for faculty or even for the whole university, the co-participation board or council that can like go decide on what direction university's staking taking. Well, half of the people in there are typically students, and students are a lot more progressive in what a university should do about sustainability than the typical staff member. So yeah, well, we've been trying to do also with the green offices to like to leverage their power for sustainability. So, we basically, when I work there, we'll have a chat with university council members, at least every month. We also organize the conference for people for like students that in co-participation councils. I just think that to like, brainstorm together about what people in these positions can do to make the university more sustainable. And tons of examples, I know a couple students who studied International Relations in Organizations, and they applied for a what's called a "Students as partners program", so you get like, paid a bit by university to like, work on the improvement of your curriculum. And they decided to do that program around putting sustainability into the curriculum, so the program curriculum of their International Relations and Organization studies. And they did like survey among the students, and they talked with students with like, in depth interviews, and with staff. In the end, these four students, they wrote a report about all the different changes they could do. And this actually led to their program hiring someone who has expertise on international relations around sustainability, so for example, the Paris agreements, etc. Other example, I know two law students who created a lecture series on sustainability and law. So, they contacted their professors and say, "hey, we want to do this", it was also students as partners program. And, yeah, so over the course of like, eight weeks or so they had one guest speaker, and then a conversation with the students who attend that, etc. And then they got a certificate when they completed it, and it was also run by students. One more example, top it off, the university when they were making a new strategic plan, they, this is not per se sustainability focused, but the boards did like an input session. It was in focus groups, like student teams gave advice to the university on what they think like, the main emphasis on the strategy documents should be for 2026. And they started

this whole program. Only the sad thing is, we had one of these, like conferences with like, 200 or so students, it was very popular. But then the COVID dynamic started. So, all the subsequent things were canceled. That was a bit of a shame. But it was very cool idea.

J: Yeah. So do you think if the students are highly motivated, the university would always give them support and help them with whichever they need or it really depends on the university?

S: I don't know how this is how this goes in other universities, of course. I only have experience in one.

J: Yeah.

S: And even then, well, it can of course, takes you some time to like, really get the support. So, it needs it needs some persistence before the university really supports you in that.

J: Yeah. And going back really quickly to the green office. Do you guys, did they have like a limited amount of students? Because I can imagine there would be a lot of students who would be interested in helping there, volunteering in the green office. So, like, apply for a job, they have to write a cover letter and be accepted? Or was it like more open to everyone?

S: Yeah, we had a board of six students that were kind of like the university employees, part time. And then there is a committee. There used to be two committees now we turn them into one that organizes like more events, and they started making a podcast for the for the organization, etc. And then sometimes you also have a volunteer working for us. But also, it takes a lot of time to like manage volunteers and make sure that like the project you're working on is worth it and it's going well, which takes a lot of management time. So out of all the green offices in the Netherlands, I think we are pretty small because we don't really work a lot with with volunteers except for the committee. Yeah. But and I think we're a bit of the exception in that regard in the country.

J: Okay, and as you probably know, we talked a little bit about the European Green Deal, and the main goal is by 2050 to be the world first Climate Neutral continent. And my question is, if you think this is achievable, then why/why not?

S: Okay, the goal was, so I'm not, I'm not a, an engineer, or, or I don't really have the expertise to really, like, make an analysis of this, of course, yeah. But, yeah, to make an educated guess, I would say that, of course, you can, you can realize it go like this. It is, yeah, it's it's ambitious work, totally change the goal of the university. But as long as you make this, like legally binding and every level of government, and don't just like say that you want to do this, but actually develop like, good policy measures to achieve that. Yeah, I think you can go a long way in being carbon neutral 2050. You could even do it earlier. But it's, of course, like the, the political feasibility, that's, I think, keeping it more back, in the sense to which and to what extent to the national governments and the national

parliaments agree with, with the goals and the directives that you bring union will be making. And while I think maybe like the Netherlands or Germany will be, like, very passionate, they are very willing to cooperate. But if you are, say, the Polish governments and your entire country runs on coal,.

J: yeah and Hungary...

S: Yeah, maybe maybe not so much. So, I think that the, the, the realism in the goal is not so much in whether it is economically possible, but whether you get political cooperation from the lower-level governments.

J: Then my last question is, again, we're gonna go back to students making the change at the university they study at, for example, at The Hague university, we still don't have a green office. So, do you think that if a group of students would come together and write a very nice, green strategic plan, do you think they would have the means to change things at the university or is not as simple as we students think?

S: Your university is making a green office.

J: Yeah, they're working on that, but it's not, how can I say, mmm, I think there are a few teachers working on that. But it's not really something like you guys have in Leiden, as far as I know.

S: Yeah. Well, Lucita from your, from the Hague university a while ago, and also to give some advice from like, my time at the green office, and why I got a vibe that it's coming. They're very fast and are already recruiting students, but I don't know, of course, about your university. Okay, but to answer your question, yeah, maybe like, if you would like write the green strategy and then say, adopt this. Yeah, maybe not so much. Because that there, there are a lot of more people probably in the organization that wants to influence what it looks like. But in Leiden university, it actually happened as mostly student's initiative. There was this petition the climate goal back in 2018, and that called for creating self sufficient and putting it in the strategic plan of the university. And now this vision is actually being created. So, yes, it is possible. So, I think I wouldn't see why the Hague university wouldn't be able to do something similar. If you start a petition with students and stuff. Yeah. And make like super easy to design and like, go around. But make it like super concrete. If you just say that "okay, yeah, we find sustainability, sustainability, very important, so you should do something about this, the Hague university", probably your university board's going to response with, "yeah, we also do find it very important, look at all the amazing things that we do". So, you need to be more concrete in like, "okay, what exactly then do you want to change? Yeah, you could say that, "okay, we want a green strategy for our university", or "we want a green office", which is now being created or "we wanted to be put at the core of our strategic plan". And that, of course, you can't simply say

that, “oh, we're doing stuff”, but they have to actually respond to the contents of the letter.

J: okay then. That brings us to the end of the interview. I would like to thank you very much for your time.

S: You're welcome!

J: And I can send you the paper once is finished.

C. Joanna Zhuravlova Interview

(i) Informed Consent Form



Informed Consent Form

Informed Consent Form

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

The interviewee has allowed me to include the following information on the interview report:

Nationality

Job title

Academic background

The interviewee has allowed me to record the interview

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: Joanna Zhuravlova

Signature:

A handwritten signature in black ink, appearing to be "JZV", written over a light blue background.

Date: 12.03.2021

(ii) Interview Transcript

Ecomatters BV

Name: Joanna Zhuravlova

Nationality: Polish

Job title: Sustainability Consultant

Academic Background: West Pomeranian University of Technology in Szczecin – Bachelor of Engineering (B.E) Production Engineering & Management; Bachelor of Engineering – Power Engineering; Master of Science – Industrial Ecology (Leiden University) & (Technische Universiteit Delft).

JO = Joanna & JH = Jheny

JH: Yeah, so if you could introduce yourself, and then we'll start with the intro questions. So basically, you can explain why you got in this field that you work at. Yeah. And explain a little bit more of what you do on a daily basis.

JO: Okay, so I'm Joanna Zhuravlova, I am a sustainability consultant at Eco Matters. We are based in Utrecht Netherlands. And I've been working there for two years now. After my graduation, from university, in the Netherlands, I studied Industrial Ecology at Leiden and Delft University. And this is perfectly connected with my current work. So yes, that's what I've been doing last couple of years.

JH: And why did you decide to go into this field? Has anything happened in your life? Or you're always interested in sustainability?

JO: Oh, no, not really, actually. That was not the case. Well, actually, I started by looking for a master in Netherlands. And because I wanted to, I did a bachelor in Poland, I am from Poland, and then I, well, I wanted to move to Netherlands because of my personal situation. My boyfriend (back then) lived there, I mean, here in the Netherlands. So, I wanted to move. But I also wanted to finish my education, which is doing the master. So, then I started looking for the possibilities. And I found out that there are many more interesting topics, and I could do in back in my hometown. Yeah. And then I came across industrial ecology, I started reading about it, and I got very interested. And I really think/thought back then, I could combine it with my previous education, which was manufacturing engineering, some more like engineering, and now environmental view, I think I thought it would be a good combination to do something interesting for my work later on. And, yes, now, I am here working as sustainability consultant. And, and that's my story, how I came into this into this field. So, it wasn't like I always wanted to do that. I didn't really know much about sustainability before because we didn't have access to that kind of information. Only now since several years, it's everyone kind of

knows nothing about sustainability. But back then it wasn't that loud about it.

JH: And are you working full time at home or you go to the office somedays?

JO: I work mostly from home. I go sometimes every two weeks, once a week to the office, so not that much.

JH: Okay, how does it work? How do you feel about it? You think it's something you can get used to?

JO: Yeah, I got used to it, I cannot complain. I like it actually even I have a little bit more time because of the commuting I have to do. So that's, that's nice. And it's working well, but sometimes sad to only see people in 3D. So that's good that we can still go sometimes, connect a bit more with colleagues.

JH: Yeah, that's true. And I also think that working from home we have less distractions. Sometimes it is good to be with coworkers, but sometimes it's too much talking and then it is 1pm and you haven't done anything.

JO: That's true. Yeah.

JH: So, I'm going to jump into the interview questions. So, the first question is, what does sustainability mean to you? And you can explain your own words, what do you think when you hear the word sustainability?

JO: Well, that's a very broad question. But yeah, sustainability for me, it's more like a way of life and living. Like, like, philosophy even almost. Because, well, it's changing. For me at least, it changed my perception of different topics, different things after learning, what is sustainability and how can we implement in our lives So, I changed my habits changed a lot. I think I also influenced other people around me with this. So yeah, so it's a way of living, thinking about something more something bigger than ourselves and our household, our lives. Thinking about the future also; like how not to make a big mess to leave after we are gone. Yeah, basically, so that's a very simple words like, my kind of definition, sustainability. And yeah, and important part of it is to implement, to make small steps. Yeah. Because we cannot make one person cannot change the whole world, but to give everyone does something, small steps, and then we can achieve some bigger things.

JH: Yeah, that's very true. I agree with that. And the second question is sort of connected with the first one, but then we're going to talk about great strategies. So, when you think of green strategies,

what do you think that means? What would be considered a green strategy for you?

JO: Green strategy? Mmm... It's certainly connected with the government, I would say. It's, for me, green strategies come from the top, which are regulations, directives, in your plans for the future, everything that is kind of enforced, coming from the top. Also, not only because green strategies can be also meant by some companies, NGOs that have some ideas and implement some new projects. For example, Eco Matters is also involved in a, like an organization that is working about working on Climate Neutral, and it's called Climate Neutral Foundation. And there we try to help little SMEs to become a bit more greener, a bit more sustainable with their businesses. So, I think that's also a nice initiative, maybe it's not as big as national and national and law. But so, it's initiative to improve sustainability

JH: Yeah, and Climate Neutral Foundation is sort of created, was created by Eco Matters or Eco Matters support this project?

JO: We are definitely involved in it. And yes, I think it initiated from from from our actions.

JH: Okay. Interesting. Okay, now question three, we're gonna talk about the EU and its sustainable policies and initiatives. I was wondering if you could name or if you can think of any policy or initiatives created by the European Union, that can be implemented by higher education institutions? Because if you think about the European, the EU Green Deal is mostly focused on companies and the local governments, but there's nothing that is specifically for institutions for universities. So, can you think of any policies or initiatives that could be used by universities basically?

JO: Well, yes, it's very specific for the university or these sectors. I'm not involved in the sector that much anymore since I graduated. I just don't have connection to it. So, I'm not sure what's most up to date, the most relevant actions there.

JH: Do you think that the, for example, the Sustainable Development Goals, do you think most of the universities could implement at least two or three?

JO: Several for sure. I think, also, as I was telling you we were also discussing that quite quite a lot. So yes, I think quite a few could be actually in some way implemented. Considering research, if you if you think still that is contributing to this sustainable development goals, research on topics for sustainable mining for example, or water water problems that were the topics I came across when I was studying. So, this research on that and encouraging students to do this, then that would actually I think, help it out. But very specific policies. I don't really recall. Maybe some, yeah, like you said,

General, national or European that is not directly connected with universities but indirectly.

JH: And do think it's possible to implement the Sustainable Development Goals also in universities outside the EU? Because one of the criticisms is that they really focus on the yeah, on the well-developed countries or most of the Western countries. So, when it comes to universities, for example in Brazil, where I'm from, the Sustainable Development Goals are still something not easy to implement in universities.

JO: That's an interesting view. I'm actually never thought about it. Because in theory, it's a global organization that created it, right? It shouldn't be on the EU. Maybe, after all, in the most developed countries, it's the easiest to start with. Because usually, there are finances for that, and people are more aware. Yeah, I think that's also important. But I think there are also initiatives outside of EU right? I don't think it is completely limited, but definitely going more forward than the EU.

JH: You know, the question four is still focused on universities. And my question is, what do you think would be the challenges that people would come across when trying to implement green strategies in universities? Why do you think, why is it so hard to implement green strategies?

JO: Well, first of all, they are formal institutions. So, there is a lot of, I think, things to arrange, like agreements and things that are bad. So, it's not as a private company, that CEO decides, okay, now we do this, there is much more bureaucracy and it's much more complicated structure to implement big changes, especially that it can affect not only one university, but the whole, every university in the country, for example. So that's a national wide change. Yeah. And with everything connected with, for me, at least with government and big national changes, it takes time and the formalities to fill in, so that could be an obstacle, I would say. Also, what could help is the national government policy that could enforce it a little bit more. Because if there is regulation, then we'll have to follow it. And maybe we'll have some motivation, I'm not sure if it's also that relevant, motivate the students to participate in like voluntarily, not only because they are forced to, but really motivate them, because we were kind of motivated, when we were studying sustainability. So that's different. But there are many other students that don't really get involved in that. That could be some initiatives to improve it.

JH: And how do you think the local government could assist the universities that want to implement green strategies? Is there anything that they could do to facilitate?

JO: Oh definitely! They could make life easier for universities if there are some ideas from from students from teachers, professors, universities as a whole. They could help to find a way within all

the regulations and legal part to make things happen more easily, for example, if there is some initiative for clean up or whatever or installing something more sustainable than they could make it happen more easily.

JH: Yeah, I think the local government has a lot of power when it comes to helping the universities. You studied at the university in Leiden, right?

JO: Yeah!

JH: Okay, good. I had another interviewee when he also studied there, and he said that like Leiden university works quite closely with the government. They do have some they do get some subsidies to implement sustainable strategies, and I'm not sure if all the universities have that. But I know that Leiden is a really good one when it comes to sustainability. And for you, personally, what do you think could be the most important step for your first response implementing green strategy?

JO: You mean, step to implement?

JH: Yes. Do you think they should change the whole business plan of the institution, or we should start smaller so from the students up or from the top down? Because some people say that students do have a lot of power, so we should focus on them and then we could build up. And other people believe that, if you change the whole business plan of the institution, then the students are going to slowly change their mindsets as well.

JO: That's an interesting view, because it's also with the whole population or government sustainability view, either either people come to make the changes, and it goes up, or you enforce it by regulations. So, I think, after all, for me, as I see it now, I think enforcing from the top has, it is better, more efficient, and faster.

JH: Okay...

JO: Because maybe people can feel a bit forced to do it, but then, if it comes with a good explanation, and it's backed up with good reason and facts, I think people could understand, and why this is happening. For example, with some loose plastic directives that came this year, last year. Yes, that's been loud about it. In the media, we were also reading about it, and our clients had questions about it, like, "oh, what does it mean for us and things like that?" So, it came up, "no, it's a regulation, so we will have to follow at some point", then people and small companies and probably private people as well start investigating: "What does it mean for me? How do I have to implement it? So it makes

things happen faster for me, after all, the regulations. But of course, if you start from people has very nice because they are very motivated, but there's no guarantee that everyone will contribute. Everything takes much longer, so it needs, a bit less efficient. But but also, they have to be informed, and they have to understand that they are doing it for for a reason, not just because it's a regulation.

JH: Yeah. Yeah. And I was also discussing with another interview, and he said, we were discussing whether or not it would be good if universities would implement a sort of mandatory course or minor, that they would explain what sustainability is and what they can do in their daily in their daily lives. And, yeah, and that's one of the questions that I was wondering, if people would be forced to follow, do you think this would be a good way to educate them? Or do you think it should always be optional? Because some universities have like The Hague university, do have some minors focus on sustainability, but still students can choose not to do that.

JO: Yes, there is a risk if people are forced to do something, they may object and contribute to it fully. But I would present it as not really "you have to do it to pass", it just it's very important. And now I think people are very aware, especially in the EU, Europe, about the sustainability and how important it is, and there is some issue to be solved. So, I think now it's less risk of people objecting to that.

JH: Yeah. and actually, not wanting to do just because it is mandatory. And then again, when it comes to green strategies and universities, what do you think is the most challenge part? You mentioned that it can be bureaucratic, you have a lot of papers to sign and can take time. And sometimes it's a lot of time consuming. But, could you give me other examples that might difficult the implementation of green strategies in universities?

JO: It depends also on which university it is because like, as I said Leiden is very aware and acting and a lot in, in this field. So, I think there would be no no big issue to implemented but some other especially in different countries, like in Eastern Europe, for example, where I'm from Poland, now it's coming. There are also those studies, but a few years back when I was coming here to study, not many people heard about it. So, depending on the country, I think there can be more obstacles from the students. Maybe they just didn't understand that they don't know that this is the issue. They might not be interested in participating in any actions. And the universities themselves, like they are much more bureaucratic, I think in the Eastern European than here. So as long as it's not enforced by the government, they might not be very open to implement. But maybe maybe I'm wrong. Maybe it's not like that anymore.

JH: Yeah, but I agree with what you said, it really depends on the culture and the country. Because, again, if I think of Brazil, I know that so many universities are starting to implement the recycle bins,

and it's something that most universities have here. So, we're still very behind when it comes to sustainable actions that can be implemented in university. So, it really depends on the country. And here, we already implement Sustainable Development Goals and EU regulations. And it's so far ahead.

JO: Yeah, yeah, I can imagine even for me coming from the same region. Yeah. So close by, Poland and the Netherlands. And I see the difference, like very clearly, and it can be even even much more from outside of Europe. Yeah.

JH: I want to think of solutions, small solutions. So, do you have any suggestions or small not so costly changes that you think universities could implement straightaway? So, changes for short term?

JO: Yes. Well, my first thought was contained, like at the university, what I noticed back when I was studying that there could be some improvements there to make. Because after all, a lot of students are forced or have to use their services during the day. So, if there were only sustainable options, then there will be no other way. So why not go this way and just make everything sustainable? With within a reasonable pricing, of course. Because sustainability is often quite expensive now. Yeah. So that could be a very simple thing. Waste separation, I also didn't see back then that not everywhere. And because I was studying in Leiden and Delft and Delft was a bit less, I would say anything. So, this little, little easy steps of don't cost too much. But that can be also sharing them awareness and improving a little bit. That was the most simple thing I could think of, and maybe some information sharing. And not maybe compulsory classes, but just some posters, not sure, very simple things, so that people read them, or be reminded or at least think, think about.

JH: yeah, yeah. I think there's a lot of things that it could be done in the short term. But again, people say that if you focus on your short-term actions, then you're really not changing, you should actually spend more time planning the long term changes, and then implement instead of doing the small things, the small changes.

JO: I think it goes together, because you cannot do one or the other. And you can adjust then "Oh, I do the small thing, so I'm fine. We are good. And leave us alone, we know how it works". I think in the background, there has to be thinking about the long-term changes, but those are more difficult to implement. And they require the higher people in their character to be involved and to actually enforce them. But the little things can come very quick, easily, and quickly make some some impact as well. So, I think they should go together.

JH: Yeah, I agree. you implement the short-term changes, while we are working on the long term.

Good! And how do you think the universities could involve more to students? You already mentioned that they could create sort of minor or alternative course that they could learn about sustainability. Is there any other actions that you think they could do to actually motivate the students and make sure they are involved?

JO: Some additional activities, not as classes for the credits, additional projects that could give them some extra points. Maybe additional points that are interesting and involving, for example, organized some meetings outside with local governments or companies, some kind of webinars or lectures, additional lectures to show how it works in practice. Maybe also involve more this private sector, and like companies that there are some sometimes projects that we have to do with a company, so that could be a sustainable company, or internship. So, there could be also within kind of fields.

JH: Yeah, I think the guest lectures with people that actually work with sustainability and do something would be very interesting for students, because sometimes again, they do complain that, and I also see that in my university, we do have some lectures and some additional courses, but it's very theoretical, we don't really see how people actually work this. Yeah, it would be nice to see how it's implemented in practice. Yeah, I also like that when we have some very practical, someone just comes and talks about their company, or what they do with their job that also gives insights, can inspire people and give you an idea, what can you potentially do after your study.

JH: Yeah, that's true. And now we're going to talk about the EU green deal. The main goal of the EU Green Deal is to be the world first Climate Neutral continent. And the deadline that they started with is 2050. Although I think is gonna, they're gonna postpone because of COVID. But still, they gave themselves this deadline, by 2050 they want to be the first Climate Neutral continent. And my question is, if you think this is achievable, or not, and why?

JO: That's a good question. Well, it's very ambitious, for sure.

JH: very ambitious. Indeed.

JO: Yes. And on the other hand, if you think about it, Europe is relatively small continent. So, could be easier than taking some other parts of the world in consideration. It's hard for me to say if it's achievable because I wish it was, I mean, I wish it will be achieved. But it's for sure, challenging.

JH: So, if you compare the situation because it's, it's good that you you're from Poland, and you live in the Netherlands, do you think Poland can implement the same changes as they will implement in the Netherlands?

JO: Well, not at the same time for sure. It's not realistic at all, because first of all, Poland is a bit bigger, and they're based on fossil fuels for many years, because that's what we had available for so far. So, this change, also mental change will take much longer, because you can see the awareness is different, and the willingness to make changes and sacrifice nothing in your life. You're good. So yes, it's very challenging. I don't want to say it's not achievable. But on the other hand, if you're if you have a goal has to be ambitious, otherwise, what is the point, right? So, you have to take everything that we can to meet this goal and achieve it. And in the end, well, if we don't reach it by this time, not 100% and still will be quite an achievement.

JH: Yeah. So, you think it could happen?

JO: It could happen, yes. I'm more like an optimist here, but from realistic view I don't say 100%. Yes, it's it will be there. Because who knows? We cannot know that. There is so many things can happen that we didn't predict, like, Yeah, whatever. But doesn't mean that we have cannot, we don't have to make the actions fast. So, this ambitious goal is necessarily actually Yeah.

JH: My last question is about students. So, do you think a student could have the means to introduce the idea of green strategy to his or her University Again, do you think there has to be a group that have to sign a petition? It has to, it has to come from the top to bottom.

I think students would be capable of doing that. At least I noticed that a lot of people do realize that is that there were more ambitious and looking forward and very eager to make some changes. Of course, not everyone is gonna do it or has capabilities to do it. But I think that easily some students could put make a course, it's probably a longer way that it comes up, of course, yes, not that easy. But I think it's doable, especially in the Netherlands.

JH: Yeah, I agree. think it's doable if it's where we stand if it's well written, and a proposal of a better change for the university, why not? I mean, I think universities, the borders are usually open to new ideas to improve, especially if you think of for the for the way that people are going to view the universities as well. It's very nice to be sustainable in green nowadays. So it's good publicity for them.

JO: Definitely, yes. And all of the students are so they do initiatives, and they also assume that the university would have them support and not make it more difficult but really, yeah...

JH: My last question is about what are you doing on your daily basis now at your workplace? Are you currently working in any specific sustainable project? Or can you mention any projects that you work in the past?

JO: My job is not really connected with universities at all anymore. It is a small company consultancy that we support our clients with their mostly calculation of lifecycle assessment. So, we do MCA studies to check the environmental footprint of their products, and how they compare to other alternatives in the market. Can they do to improve their carbon footprint reduce it? So, it's very, very specific field I'd say what we do. And as I mentioned before, we also have the project that not only zero rated, but also about regulations, like companies were coming. What does this single use plastic directive mean for us? Because we are in this sector and we don't know. And they don't have resources to do that. So, we are also supporting them in depth. And the climate nature Foundation, I think is the most sustainable project or big, the thing that really makes a difference from a very small scale, very small shops in Utrecht, but it's definitely showing them, spreading the awareness.

JH: Is it most focused, the projects that you work, are mostly in Utrecht or are you also working with companies from other cities in the Netherlands?

JO: Oh, well, we have international clients, because they're not only based in the Netherlands, but in other countries, so that's difficult to say.

JH: Also, in the EU, right? You didn't go to?

JO: Yes, yes. But those companies are chemical companies, some of them so they have facilities outside of the EU. Global, more global then.

JH: Okay. My question is, do you have any questions? Any comments, anything?

JO: I was wondering about the next steps about your research, like, what do what is your plan? Maybe?

JH: Yeah, so now I'm currently finishing ranking universities. And then, after I have ranked all the 20 different universities that I selected, I'm going to choose the four most suitable ones. And then I'm going to elaborate on the strategies that they've implemented, and then create a sort of guideline for universities that want to implement. But then again, it's mostly focused on the EU because like I said before, there are a lot of things that we still don't have, for example, in Brazil and Mexico and also in the Eastern Europe. So, I think guideline is more for the Yeah, for the EU and the western part. And yeah, hopefully I'll be finished by May. After that, I will finish my studies, I'll be graduating.

JO: Okay, sounds good. Yeah, good luck with it. Well, maybe I don't know if I helped you a lot, because I'm not really in the field of education anymore. But hopefully a little bit

JH: And then I can send you the final version.

JO: Okay, that's interesting.

JH: Thank you so much for your time. I wish you a nice week!

JO: Yes, thank you.

JH: So let's stop recording now.

D. Paulo Huguet Ferran Interview**(i) Informed Consent Form**

THE HAGUE
UNIVERSITY OF
APPLIED SCIENCES

Informed Consent Form

Informed Consent Form

1) Research Project Title: **Sustainability and the role of higher educational institutions**

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

The interviewee has allowed me to include the following information on the interview report:
Nationality
Job title
Academic background

The interviewee has allowed me to record the interview

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:


All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: PAU HUGUET FERRAN

Signature: 

Date: 22/3/21

(ii) Interview Transcript

Ecomatters BV

Name: Paulo Huguet Ferran

Nationality: Spanish

Job title: Senior Sustainability Consultant and Lead Spain at Ecomatters

Academic Background: Bachelor's degree in Industrial Engineering (Polytechnic University of Catalonia); Master's degree in Industrial Ecology (Delft University of Technology and Leiden University).

P = Paulo & J = Jheny

J: I'm just gonna jump right into the questions. So, if you could maybe start introducing yourself explaining what worked. What do you do at the moment? And what you studied before your job. So yeah, a little bit of your academic background as well.

P: It's fine. Yeah I'm Pau Huguet I am an industrial engineer and industrial ecologist. I studied industrial engineering in Spain. This is a, that's how it used to be a Spanish degree, and now it's a Master's. So it's five years studies, superior education. And it covers basically all kinds of engineering, from mechanics to electronics, robotics, a bit of construction. So, what we have here, and there is a broad approach to engineering. I graduated in 2008. And then I work a couple of years as engineer more in the construction field and yeah, railway specific specifically. And then I wanted to work in something a bit more meaningful to me. And I decided to study a master's in industrial ecology to shift a little bit my career towards sustainability. So, I moved to the Netherlands. I studied industrial ecology, and Delft and Leiden University is the shared masters. It was a shared masters, I think it still exists in the same way. But at least back then, was this configuration. And yeah, I started working then at Eco Matters. And since then, I am working as a sustainability consultant, they're working mostly in Lifecycle Management. So basically, using metrics and quantifying sustainability in order then to provide companies with answers to all kinds of sustainability related questions, strategy, communications, marketing, support, sales, etc. So yeah, offering flexible, flexible sustainability consultancy to them. It's maybe worth saying also that that will shift jobs risk very soon. So, I will dedicate myself more industry and I will work more in implementation. So, moving a bit from consultancy, to actual rollout of sustainability within industrial companies. That is something for the short future. So probably next month, starting there. I need welcome to this this stage of eight years working at Eco Matters now.

J: Nice. And Eco Matters provide consultancy to companies outside as well?

P: We work on site. Yeah. So, what do we do mostly is desk does consultancies. So, yeah, we don't

do like process engineering, or we don't help companies, let's say to redesign their systems. Because we work a lot for large multinational chemical industry. So, it requires a lot of technological knowledge to dig into that. So, we're really focused on the quantification of sustainability identification of hotspots. And they're transferring this knowledge to the companies to the right places in the in the company, so they can take over that and then implement the changes themselves. I mean, there are some times that we can offer some advice when it's more elemental. Especially when maybe when it refers more to their value chain, downstream. But yeah, changing chemical processes is not something you can really easily do. It has a lot of interdependencies. It's something we cannot, we cannot offer them. We are a small consultancy office where 10 people working. Now, I think we're 12 people working but maybe 10 full time employees. So also our capacity is quite limited in terms of offering broad services to companies. We offer a bit of toxicology and risk assessment and consultancy as well. Used to focus a bit on legislation and Regulatory Affairs, we are still providing this type of services, but more in a limited way now. And yeah, more or less. That's what we do. And that's where my expertise lies.

J: And was there any particular event in your life that helped you decide to go into sustainable field? Or were you always interested in sustainability? Or it changed when you finish your degree?

P: No, I think I think I've been in general interested in sustainability, but not maybe to work myself as a sustainability practitioner or just dedicate myself into the sustainability field. It was more when I started working that, yeah, I got some some somehow tired of some working dynamics that I thought, yeah, sometimes sometimes work environments are not so constructive. And yeah, I just I just thought, yeah, I don't want to work like that forever, all my life. So, I need to find something that can where I can, where I find I can contribute more to society. And I thought that it didn't need to be sustainability as such, it could have been more I don't know working more in the social sides or I don't know taking other's perspectives on work. But somehow due to my expertise sustainably, there was quite a good fit. Also, also something that I was generally interested in. So not something that I, let's say calculated, that wouldn't be the best choice. But definitely something where I thought I could bring in quite some value. So, I decided to move into that direction was nothing particular more just like growing as a professional and saying that that was more than a direction I wanted to evolve.

J: Okay, nice. Interesting. And I'm going to start with the, the interview questions. So, the first one is, what sustainability means to you. So, when you think of the word sustainability, what comes to your mind?

P: Well, to me sustainability, it has different readings. So it pretty much depends on the context where speaking. I mean, there is it's a broad definition, and it's a broad term. And depending to who

and in what context I'm talking to, I may mean one thing or another. Normally, let's say in my professional working environment, sustainability means operating in a way that you don't harm, or that you reduce the harm, or the side effects of your activities. So, to me, that means operating, let's say sustainably in a sustainable way. That's that's this idea of matching the needs of society, while not, let's say, harming the planet, and nature. That's, that's my, let's say, my vision when, when we are referred to work, right is more like an operating framework. But then, of course, if I'm thinking I don't know, in other contexts, maybe something way more rooted into nature, right? It's not, then maybe all these idea of operating while minimizing damage or while not causing damage. Well, the operating power vanishes a bit. And it's more about just behaving in a way that protects nature itself.

J: Yeah, good explanation. And what do you think green strategies are? What would you define as a green strategy?

P: To me green strategies would be those are strategies that can contribute to what I've just said. So, to allow the, let's say, allow society to operate in a way that does not cause damage to the environment, or that minimizes damage to the environment. Minimizes, reduces so it depends on the context. If we are talking about maybe new processes, I would say, well, it should be not causing damage. But if we are talking about very polluting processes that are ongoing renovation and evolution that will be more towards reducing. So also, depending on your starting point sustainably demands one thing or another. And there is no value judgment in that to me, in a way that I mean, any, any improvement is good. Applying an improvement doesn't mean that the activity that you are doing is good or bad. So, you can do a lot of sustainability action while still being barely sustainable. And you can be very sustainable by doing very little action.

J: That's a good point. Haven't thought about that. And when it comes to the EU and the EU policies and initiatives, do you think are there any EU policy or initiatives that universities could implement, that can be considered green strategies. So, for example, most of the interviewees, they mentioned the Sustainable Development Goals. That it's the easiest one for universities to implement. But can you think of other example or other strategies that universities could implement?

P: Yeah, I guess I mean, not not thinking about the specific measures. But of course, they're all the energy directives. Energy efficiency. I mean, in in many ways, I mean, let's say the Commission and Europe has a lot of policy that can have sustainability implications, right. It doesn't mean that it's just per se, aiming at sustainability, but also that can impact on on the sustainability performance. And I'm not aware what we what could be more meaningful for universities, but I'm pretty sure that there are many, many legislations that can be applied by that that is implemented actually, by universities that can contribute to that purpose. I mean, it's, it can be as simple as subsidies for projects. I don't

know, renovating buildings. And that's something that can be done, maybe driven by the Commission, or EU funded projects or applying Sustainable Development Goals are many other things. So, it's just the I'm not sure we'll go through that later. But to me, what, what makes them connecting to the previous to previous question, what makes a green strategy meaningful is what is focusing on, right? I mean, I don't know universities. Yeah, there is many legislations on I don't know, emission of gases to the atmosphere. Is that relevant for universities? No, they have to accomplish with that, if they have labs and things like that? Well, I'm pretty sure they do. But that's probably something they need to do. But this is not their core activities. So, saying that this is the green strategy for a university? Well, I would say it's not, but maybe sustainably, implementing Sustainable Development Goals in a in a meaningful way, can be something that can contribute to their, let's say greening, or more sustainable performance practice.

J: Yeah, definitely. And when it comes, again, to implementing green strategies in universities, what do you think would be the hardest part? The most challenging step for higher education universities/institutions?

P: I think if I think about university, where I mean, when where university has a very big impact is in the, let's say, in the in the, in the generation of knowledge they do. So So basically, university in terms of, I don't know, pollution that they they may create as well limited, right? It's just like, well, facilities having some heating, some light, yeah, some energy for the labs and research. But in principle, let's say there is no very large impact from the activity itself, then you have all the commuting of people and traveling and so on that Well, certainly one be small, but also, it's kind of indirect, while the knowledge and the and yeah, the knowledge and the activity that they generate, as a result of the of the location they they teach and the the projects they develop, that's something very critical. So, the question was, what are the challenges? Yeah, I mean, I think I think, actually, universities do a very good job because they have very good established priorities. So...

J: Changing people mindset

P: Yeah, changing people mindsets, and also the research topics, I mean, generally, look for more more sustainable, I mean, it's not that you are developing at this stage, like new technologies that are highly polluted. But the majority of the research moves towards implementing sustainability practices in several industries, I mean, in general, right. Or or more in the social sciences also supporting sustainability in their, in their spread throughout the society. The challenges, well, basically keeping keeping these sharp, I would say, so that I mean, from my experience, so universities can be also not very fast movers, some aspects and the challenges that society is facing now require quite some fast moving. So how to how to translate how to make this knowledge, these

research cascaded into society quickly and effectively, I think that's a very good challenge. Also, I see a lot of research being implemented and universities working in research, and sometimes it's difficult to see how these will actually end having an impact in society. And probably it will do but yeah. Research has a low, low base and changing changing, yeah, socio economical systems is also a long process. And we have an urgency in implementing sustainability practices quickly. And we need universities, higher education institutions to work harder.

J: Then what do you think could be the role of the local government? When it comes to give the support to the university? Do you think they play a big role?

P: Yeah, I think I think, and I see that this is working well, in many places, I mean, local governments can help to connect the, let's say in, yeah, the society with the university, right, that the universities and high high high education institutions then doesn't doesn't stay as a place that lives a little bit isolated from the from their environment, but that really connects to people, to cities, to towns, to infrastructure, to companies to industry around, so that all these transfer of knowledge becomes more accelerated. And, yeah, society and university as being part of society, of course, kind of work together to to accelerate all this transition and to contribute to common goals, it's important that we have an alignment on all that, because otherwise, it's just a very research for nothing, yeah, it's worth nothing. And also, I mean, companies industry without evolving, become outdated, and that in time, it's just like, matter of time. So, it's important to have this alignment. And I think local governments can contribute a lot to that.

J: They think they should provide some sort of subsidies or which kind of help they can actually give to universities. Because I know that, for example, the university in Leiden, I interviewed a person from there, and he said that they do have this close relationship with the local government, and they do get some subsidies. And that helps them because the green offices, one of the best that we have in the Netherlands and the projects that were created within the university and also outside in the city itself. So do you think they should give any other support apart from the financial help?

P: Yeah, subsidies are important, but also only under the fact that I mean, the knowledge transfer from from university to industry into society is something that requires like multiple, multiple perspectives. Local governments can definitely steer that, for instance, supporting research at universities, but not only financially, but really like taking research from from university and implementing it. In Barcelona, we are here, a city with 1.5 million people living. I mean, the budget of the City Hall is quite significant. I mean, by engaging properly with the university, we can have pretty cool examples of cool demonstrations of program technology being implemented in the city, for instance, and technology or social sciences. I mean, many, many things, that the collaboration, I

think it's not only about giving subsidies to create the green office, but really allowing this green office then to play in the city, though providing the testbed for a lot of concepts that then can be rolled out if successful. I see more the local government. I see a little bit more than the rolling to that direction. I think subsidies we have a European, for instance, European Commission. Yeah, has quite important financial strains being directed to universities or research in general. May be a bit more meaningful because of the scale, and then these rollout of technologies, I think it's something that from the bottom can be more activated.

J: Yeah, definitely. Now, we're going to go to question six and seven, which are sort of connected. I have to explain question because it is a bit confusing. So, question six is, what would be the most important step for higher education institution when it comes to implementing the green strategy. And what I mean by that is that some people, we believe that you have to change the whole business plan of the university, this whole core of university, and other people will say that if we implement small changes, such as waste separation, changing the lights, those already are significant changes. So, what do you think would be, university should prioritize either changing the whole business plan, or implementing the small changes? In what would be the most difficult and the most, the one that would have most impact?

P: Yeah, I think it has. It has a twofold here. On one hand, it's important to give example and I think universities should do that. So because it's because the type of organization they are, they should make sure they show they do everything they can. So, it's about paper, recycling paper is about recycling paper. And they should do that. What is important is that they stress the important stuff. So, do as much as you can, and focus pretty much on the most important and most important things. And I think, in that sense, higher education institutions, at least some of them know very well, or they can do to really maximize their efforts. So to me separating waste streams in a university, that's, that's really nothing.

J: Yeah, that's the bare minimum, they should do. Yeah

P: Yeah. I mean, it's just more for this reason, right? Just because you have to do it because you cannot afford not doing that. It really has no meaning. That's not sustainability action. That's nothing that's just even greenwashing, if you want to call it I mean, there's no because it counts. But but it's it's really something I don't believe in that tailoring, for instance, their portfolio. So for instance, well, something very ambitious would be, "whatever we we teach here has a very strong focus on sustainability". We we are not going to promote certain technologies or just we will look at them very critically. But of course, dynamic is a university. I mean, and you can see, for instance, these in technology universities, it's pretty obvious that there are some of the studies that still have a very

strong bias towards certain industries that would to me not be acceptable from a sustainability perspective. So clearly, clearly polluting industries that still have a very strong power, not power but influence in certain communities within a university. Well, I'm not saying you have to cut this. But if you want to be really ambitious, from a sustainability perspective, that's where a university has its more relevant impact. So, if you don't teach that anymore, if you teach it from another perspective, more towards a transition, maybe that can really make a big change. And that's, I think, important, very important, but also very difficult.

J: And along to

P: Also, also, I understand that it's not, I mean, universities are not there maybe to make value judgments on what they teach or don't teach, right? It is just transferring knowledge from generations and improving society. And well, some of these technologies have improved society a lot, but maybe are not fit for purpose anymore. I don't know.

J: Critical thinking, yeah, that's good one. And then question eight is, it goes back to what you already mentioned. Would you have any suggestion of is more not so costly changes, that the universities could do? Do you think it...?

P: It doesn't apply only to universities, just, I mean, the energy, let's say, energy supply, not not having a full green energy supply nowadays? I mean, it's just, it's something I don't I don't really understand why. I mean, I understand some big companies, maybe maybe the depending on on prices, and yeah, there are some extra fees that may be difficult to deal with, but a public institution like a university and, for instance, the electricity bills broadly that they have to manage, I think that well, well, they should. It's a bit connected to the thing of the of the paper and the waste separation, but it is not for that to me changing your electricity supply for a greener supplier is just something so easy to do. And with with a good impact to society, because it's not only, I mean, in terms of great mixes, you're not gonna change anything, but you're really give a signal to the market and a signal to society. And that's something good also to show because it's not only what you are doing, but also showing that that's very easy. And you can tell your communities. That's something that I'm I'm really strong focus. So, I always, when I have these type of questions, whatever is the topic, I always say, well, that's the first thing I would do if I had the company. I mean,

J: Yeah, yeah

P: Probably? Well, I think I think here in Spain now, public institutions, I'm not sure if they are forced, or highly recommended the use of green energy. But yeah, I mean, probably, there is law, also

requiring them to go into that sooner or later.

J: Yeah. And the waste separation? Do you think that most of universities, if you think of Spain, do you think most of them would already have the waste separation?

P: I mean, if I think about the waste they have at the university, I mean, is modeling. Yeah. I mean, depends on the on the, of course, on the area, right? Of the university. A lot of universities will be mainly paper and office supplies, which have to be separated still, but that's something relatively easy to put in place. And then maybe it is more like they are no more technological stuff. They may have, like, some tests. I don't know, chemicals. Oh, yes. Buy your related waste. But that's also highly regulated. So probably, they have to do it anyway. I think it's something very, very entry level. And I would say that here in Spain, this is quite well, I mean, when I was studying, and it's been quite a long time already. I do think they were doing waste separation.

J: Yeah, I'm just asking that because in my university, the Hague University, it was implemented, I believe, at the beginning of last year. And that's because a lot of students were asking, like, "hey, that's the least you guys can do". Let's just have the paper in the plastic and, and now it is implemented, but it's quite new. And I was amazed how long it took when it comes to, like the small changes that yeah, should be super easy. And the least the universities can do. But it's there now.

P: Me throwing a paper in a normal bin, it's just like something, it's just, it's not entry level. Otherwise, it's like, what? This this is not this is really like, yeah.

J: And then we go to question 10, which is about the EU Green Deal. And as you probably know, the main goal was to be the first Climate Neutral continent. My question is, if you think it's achievable by 2015, and why and why not?

P: Yeah, and I think I think it is achievable. Yeah. At least in terms of objectives, you know, it's just like, I'm, I'm not sure how one word will mean, being climate neutral, but in terms of objectives, I would say, yes, it is achievable. And probably will be the case. I'm quite optimistic in this perspective, because what I mean, what I see is just a very fast-moving energy energy system, of course, with a lot of dependencies. And, and there is still a lot to do. But, but there is, I mean, a clear change, ongoing. Also, industry is moving fast in that direction. I mean, just like when you see the commitments of companies, in terms of climate neutrality is just overwhelming really, like the last couple of years, the last three years, it's been just something like super progressive to be now completely mainstream in the corporate list. How this will cascade throughout value chains, how will reach the individuals in societies, that's something more complex. Of course, there are big questions

like agriculture, transport, that may be a bit more difficult. But at least from an industrial point of view, I would say it's largely visible at the end, when when changes are start. I mean, the pace of change, it's sometimes various slow at the beginning, but when they momentum and can become can be gone really fast. So, we have to see if the springs and all the energy change will be more exponential or be more gradual, but definitely will, will happen in a very significant way in the next couple of years.

J: Yeah, you sound very optimistic.

P: You are not so?

P: No, because also when I think of I also had an interview with maybe she's a colleague, Joanna. And she was talking about this situation Poland, and I also compare it with things in Brazil. And we were saying that we know that especially the Eastern countries, in Europe, they're still they have other problems their priority. So, for them to sustainability is still, especially changing people's mindset, that might take a long time. So and also they have other problems that could be seem as a priority. So they would think, okay, I can, I can try to be more sustainable, we can try to implement many strategies on this, but I have other issues that really need my attention, before I can even think of sustainability. So, I think that might be a problem. But again, the EU is promising to help them to provide subsidies to those countries that are not as developed as the Western country. So, I don't know...

P: That's true. That's true. I always tend to, I mean, yeah, I'm quite physically at the Western side of Europe. Yeah. When I think about Europe, I really think about Western Europe, and I tend to forget about East. But still, still, I think the commitments are very hard. Also, of course, there is local industry and local dynamics in the in the East Europe. But also, there is a large interconnectivity between between East and West. And yeah, maybe Poland will still be polluting by 2050. And we'll still have some of the the objectives of the climate neutrality, I'm pretty sure what will be cheaper then

J: Going back again to university and students. How do you think universities could involve the students more in their green strategy in their sustainability plan? So, for instance, somebody versus they do have the green office, but it's not yet all universities would have something like that. So, do you think they should have sort of course a minor, how they can get all the students on board?

P: Sustainability in general, and that's something also that connects a little bit to what we were discussing before, it's moving from an isolated topic to everywhere. It's really I see it in my daily work, it's just, I'm doing strategy, I'm doing sustainability support, and what I do see is that, since it's

becoming more implemented in legislation, is not that much driven by for instance, sustainability teams, but just implemented throughout companies. So, each department have sustainability specialists, when they do new projects, they also have a sustainability perspective, understanding what are the implications of sustainability, the implications of them. And that connects a little bit to, I think what universities should be doing that is, instead of making a minor on sustainability is just putting sustainability everywhere in everything they do. Okay. And, and that means having sustainability courses within all kinds of all kinds of studies. But also, in each course have a sustainability perspective. That brings, I mean, when we were, I mean, for instance, we were discussing before about some technologies that maybe not suitable anymore in the sustainability mindset, right? Well, maybe not how they are oriented now. They need just a completely reframing from a sustainability perspective. And when we think about mining, maybe we need to think about mining in other ways or mining some other things. But just try to break with some historical backpack or, yeah, heritage that we all carry. That's done by implementing sustainability everywhere. Yes. Yeah, because it's one of these horizontal topics that need to be read. That is not is not enough in having one minor one course. It is. It has to be everywhere, right? It's just like with human rights, with gender, with all the all these kind of horizontal things in society that touch everything, they'll have to be everywhere. Otherwise, it's just it keeps an isolated number of people that are like, sustainability fighters, but then don't transcend beyond that, and what not what we are trying to how I see this working.

J: Yeah, we all must be together in this otherwise we cannot change.

P: Yeah, absolutely. Even the ones that don't agree with that, or that don't share the same, the same vision, it has to be part of the normal.

J: Yeah. Do you think students would have the power to implement changes at the university? Or it has to come from the top?

P: It's always a big thing. I mean, it has to be a very top. I mean, a clear vision from the top, but also implication from below. So, from the bottom, of course, they can challenge the top to start implementing things, but at the end, it's important that the, the, the universities, or at least what I know, it's quite hierarchical. Yeah. Actually, for instance, here in Spain, maybe it'll be more or less how I perceive it. I don't really know that. But my perception is that here is a bit more hierarchical. In the Netherlands. It feels like it's more like research themes, like a coordinated a bit more blurry everything. But here that I do see, like the typical high education hierarchy, yes. Well, if it doesn't come from from top, it's difficult that gets really yeah...

J: Well, I am done with my questions. Do you have any questions? Any final remarks?

P: No, I don't think so. I think it's been a nice conversation.

J: Yeah! Thank you so much for your time. I'm just going to stop recording.

E. Irene Maltagliati Interview**(i) Informed Consent Form****Informed Consent Form****Informed Consent Form**

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

The interviewee has allowed me to include the following information on the interview report: Nationality
Job title
Academic background

The interviewee has allowed me to record the interview

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: Irene Maltagliati

Signature:

A handwritten signature in blue ink that reads 'Irene Maltagliati'.

Date: 12/05/2021

(ii) Interview Transcript

University of Groningen

Name: Irene Maltagliati

Nationality: Italian

Job title: Green office coordinator | Environmental Psychology at Rijksuniversiteit Groningen

Academic Background: Bachelor's degree Psychology (Università di Milano-Bicocca); Master's degree Health and Social Psychology (Maastricht University); Master's degree Environmental Psychology (University of Groningen)

I = Irene / J = Jheny

I: Yeah, I think it's happening.

J: Yeah. Perfect. So I'm just going to jump into the questions because I have wasted some of your time. Thank you so much for being patient. So maybe first you can explain what exactly you do. What you are currently doing as a job. And then we can jump into the research questions, please.

I: So since a year and a half I'm a coordinator of the green office. The green office is part of the sustainability department of the university. So, the week rate basically, projects initiatives and policies, also with other departments related with sustainability. I currently supervise for Student Assistance that work on program with study associations to make them more sustainable, coordinating volunteers, communication and organizing events. And I do myself other projects and policies with sustainability.

J: And students that are in the green office, are students who are currently studying at university, or do you also have students that are doing part time or are not studying at the university, necessarily?

I: ya know, this four students are students at the University of Groningen and they're paid time to work with us.

J: Okay, nice. And how long have you been working on this position in the green office?

I: Sorry, can you I can't hear you very well, there is a background noise.

J: Oh, sorry. I was asking how long you've been working at the green office?

I: Oh, a year and a half.

J: Okay. And were you always involved in things related to sustainability or it was all new for you?

I: I did some research job at the Faculty of Environmental Psychology

J: So it was already something you're interested in. Right. Now, my first question is, how would describe/ What do you think it means suitability for you? When you hear this word, what comes to mind?

I: Yeah, for me, sustainability is indeed mainly related with environmental and social sustainability. Indeed, that word for environmental sustainability is mainly the via how we lower the negative environmental impact that we have on the environment. And for me, social sustainability is more related with having a society in which people have a good well-being health and conditions.

J: Okay, when it comes to green strategies, what would you think that means? What what can be considered a green strategy for you?

I: Yeah, for me green strategies can be policies, project initiatives, but also campaign for me could be a green strategy. So, whatever is aiming to create some change towards more sustainability.

J: Okay. And do you think there are any EU sustainable policies or from the UN as well, that could be implemented in higher education institutions, that could be used as a great strategy? Because most of the interviewees that I had (sorry), they mentioned, the Sustainable Development Goals, I thought this is wonderful.

I: I think already dividing sustainability in the Sustainable Development Goal is a good idea. I also think that the EU does give quite some money for research on sustainability, which is quite positive, it could be a bit more, but yeah.

J: Yeah. When it comes to challenges, and it's good that you work at Green office, so you know this very well, why would it be the hardest part? When when a person is wanting to implement these strategies? Is it the bureaucracy side, and it comes from the students or from financial reasons? What do you think is the hardest, yeah, t hardest challenge here?

I: Yeah, I think the main problems that we are having is that sustainability is still not always a priority. So, when you have to develop a growth strategy, then you really sometimes have to convince either the board of the university or people from other departments that this is important. Regarding students, I would say there are quite some motivated students that help on sustainability. But of course, it's not always easy to make everybody understand about the importance. To make an example, we had a survey because we were trying to integrate sustainability in the curricula of the medical faculty, and in the survey student answer something like: "well, we already have so much to do. So, take your tree hugging mentality and bring it somewhere else."

J: Wow!

I: So let's say that the majority of the students I think, are interested in sustainability. But of course,

if this means that there are more, more for you to start with, then of course, this is a problem. And then also, the cost of the strategies is also a problem. Often strategies for sustainability are time consuming, to prepare and financially expensive.

J: Yeah, so it really sounds to me that the biggest challenge is to change people's mindset. Because we do know that students are motivated and they want to learn more, sometimes we have to change the mindset of the teachers and lecturers that sometimes don't even understand what you mean with sustainability, and what exactly you want to achieve with that. So, I think the mindset is very hard to change.

J: And what do you think it would be changes that could be implemented straightaway? So, the short terms changes, and that are not so costly or not so bureaucratic to implement that universities could start with? So, let's say a university doesn't do anything related to environmental sustainability, and then they want to start with baby steps? What do you think they could change straightaway?

I: Well, I think so if you want to have a very low cost and low costs and less bureaucratic strategy, I would say campaign is always a good idea. The only problem is that many universities think that a campaign is an awareness campaign only. The problem is that awareness campaigns usually do not work because people can be aware of a problem, but they cannot, maybe they don't change the behavior for other reasons. For me, a campaign is a good way, if there are indeed psychological insights that are used to design a campaign could be very cost effective. But very, sorry very less cost, less costly, but more effective at the same time.

J: And do you think you should start from the university, from the students, or it should be combined?

I: It should be combine, I think.

J: Okay. And what do you think would be the most significant step that high universities/higher education institution would take to walk towards a more environmental/sustainable, to be more green. So, for instance, I had some interviews that they mentioned that they could implement suggestion box somewhere in university, because it's something that is not so costly. And it's always showing the students and the people that work in a university that they are taking it to account for, they're starting changing their business plans. So, something along those lines, so you think it can be an important step to also tell people "okay, we're going to start doing something!"

I: So I think for me, one of the most important steps is indeed to try to reach a carbon neutral university, and I think there are steps that could be implemented, also in a more top down level. Sometimes, the board of the university do not agree because they are afraid of taking away people's freedom. Yeah, to make some example, there are some canteens, some university's canteen that are 100% vegan and vegetarian. Or there are universities that are plastic-free. There are some I

think it is necessary sometimes to do some very big change in policies. But sometimes people are afraid of what will be the reaction of students and staff.

J: Yeah, so do you think they should maybe prepare a survey/questionnaire, or they should just implement and see the reaction? How do you think they could go about?

I: Well, I really like, there is a study about the congestion charge in Stockholm and is very famous. I would say in the psychology area, because they really show that sometimes people do not approve of a policy. But once you implement it for a short trial period, and people start to understand it better, and notice that the old fear that they had before are actually not there. So, my suggestion would be to, of course, have survey, but also try some trial periods. Students and staff will understand that is not something that is as bad as they thought.

J: Yeah, that's a great suggestion! Yeah. They could easily implement that. And do you think there's way that the universities could involve more the students and also the staff. Do you have any suggestions of things that you guys are already doing at the Groningen University, that could be implemented elsewhere, and also outside the EU?

I: We have a green ambassador program. And the idea is basically that each faculty has his own little green office. These are all volunteers that they run their own events, their own campaigns, their own project, but they always inform us so that we can also help them and give them budgets. So, this is a good way to involve especially students, because they're always motivated to do practical things like events or activities. We also have now another program that is called Green Committees. And these are more related for staff members. So sometimes staff member would like to solve specific issues in their own faculty, but they don't have much time for it. So, what we do is we organize meetings among people that are interested, we have, for example, a group of how to make the labs more sustainable, like reducing single plastic, for pipettes, and so on. So, the idea is that we have more than inputs their idea will discuss together. So, I think this is a good way to have feedback from students and staff member, but also help them implement their own ideas.

J: In the green office, divided within the studies, how does it work with the students that want to join? Do they have a limited amount of students, or everyone is sort of welcomed but they have different tasks? How does it work?

I: Yeah, so we have a signup form, students sign up, and then we set the student to their own faculty. We have, we have now no limit limit amount. So now we have at 135 students more or less, but we tend to consider some people that tend not to come for a while then are considered inactive. And we ask them what they want to do. We have another project that is to ask students who do not have enough time to become like occasional volunteer. This way, they can still be involved, even if they can do it once every three months or so.

J: So they really have no excuse not to be involved. If they want, there's always room.

I: Yeah, yeah. We always try to say that it depends on how much time they have. That has been working for us. Otherwise, indeed, we ask too much from them, and then they take it and then they just leave.

J: Yeah, don't want to create an extra task for them. So, you really try to make sure that they can manage their life and everything and also be part of the office. That's a very nice idea!

And I'm sure you're familiar with the European Green Deal. So basically, the goal was to be the first neutral continent by 2050. And my question is, what do you personally think? Do you think it's achievable or not? And why/why not? Or you don't really know/you can't really say?

I: I really don't know. Because, one, so on one side, I'm very hopeful that, so one side is going to be difficult because like this climate change problem and this carbon problem really requires a lot of cooperation and a lot of also help from companies and local governments. And it's such a complex topic that sometimes I'm very skeptical that this will happen. What I hope is that by 2050, with the technology that we have, maybe we'll actually find a way to capture carbon in a better way. But yeah, let's say that, I hope that the cooperation will work, and some technological development will come out but I'm also a bit skeptic.

J: Okay. Yeah, that makes sense.

I: Also, by 2050, I think half of the Netherlands will probably not be there anymore.

J: Yeah, (laughs)

It's a very interesting question, because I also interviewed someone from Poland, and she brought up something, that's also something that I agree with her that it's when you are living in the western part, it's really easy to think that is achievable. Because you're so used to sustainability. Everybody cares about stability, everybody recycles. There's like, it's so it's so clear so often for them that they have to do. But then when they come from, for example, still about Poland, we have so many other issues, that sustainability is like, the lowest thing, it's not something that we think about it, we have the government, we have the healthcare system that is not working well, we have so many other issues that to recycle, it's like, yeah, "I'm gonna recycle once I have all those things sorted". And for me is the same because I come from Brazil, and we still have universities and schools that don't have recycled paper plastic separation, because they have so many other issues that being sustainable is not at all, one of their main goals, or even in the business plan of university. So that's why it sounds very... I'm not sure if I think is achievable. But it's nice to set goals like that, again, we have to be ambitious, and the goals, if at least we have 50 or 60% of it, that would already make a big difference.

I: I forgot some suggestions I did I think about. Another way to involve students is, huh, many universities have a living lab. So, the idea is that students use the university as a living lab for their own thesis or assignment or internship on sustainability. So, for example, we have some students that did the thesis on how to make the library more energy efficient. I think this is also a nice way that many universities are already doing to involve students.

J: Yeah. That's also very nice. And do you think the students do have the power to introduce such changes to universities? Or do you think it should, it really has to come, it has to be combined students and the university, or it has to come from top to bottom. Because I know that again, in Brazil, we do have universities that the students are eager to change, but they don't have the support of the university or they don't have the financial, they cannot cover the financial costs. So, they need the for the support of the university. And again, this is not the priority. So, do you think if a group of students would join and make a nice business plan, would they have the willpower to change, or everything has to be together with the university?

I: Well, I always suggest cooperation at the end. Because we have students with very nice idea, but of course, as a student, you don't know how the university works practically. So then, I think that for having an idea, students can also come up by themselves, but for implementing it, then it's difficult to implement it if you don't know exactly who to contact or which external company are associated with that, and so on.

J: Again, talking about contribution and cooperation. What do you think could be the role of the local government? Do you think they could provide some sort of subsidies? Or how could they assist the universities? How could they work together?

I: Well, one of the first example that I have in mind is mobility. So as university we can try to motivate people as much as possible to come with a simple mode of transport. But if there are no more sustainable mode of transport, there's nothing we can do. So local governments, for example, invest heavily on hydrogen or electricity, buses, or places where you can park the bike or ways to, I don't know rent bikes on the street. So I think that the government should help a lot on a structural level. But also, it's nice to do projects together. Like if you want to motivate students to save energy, then this can be done. I don't know at the university but also at home at the same time.

J: And does the university of Groningen have any partnership or anything with the municipality or...?

I: Ys, we create projects with the municipality mainly, especially for mobility. Also for a topic like climate adaptation, we were planning to also do tiny forests together around the city. So, there are some some projects going on.

J: Okay. And I think it's also a good advertise for the local government and for the university. Because like, one of my interviewees said the universities have the expertises, but they don't have the budget.

And the government does have the budget, but sometimes they don't have the knowledge required to implement something. So, it becomes the cooperation is always the best way.

I: Yeah, that's also like a common cooperation that the municipality contacted different faculties and pay for research, for example, for a PhD, and then the professor can put his knowledge trained a PhD, but at the same time the municipality receive information about it.

J: Yeah, it's a really win-win situation, I think. Do you have any final comments or any other projects that you think would be interesting to mention that you guys are working at Groningen university? Any remarks?

I: Well, there is a project that we hope to start. It is actually, the idea came also from some students. The idea is related with Erasmus students. And the idea is to create an app where people from Europe, students from bureaus that are going to Erasmus, they can fill out their, their destination, and they can find other people to travel by train with so that they will not travel by flight anymore. It is based on the idea of BlaBlaCar.

J: Yeah, nice!

I: So the students actually, well many people came up with this idea, but the students presented very nicely. So, I think that's something that we are going to work on in probably contact other universities because I think this could be very useful.

J: Yeah. Well, that's a great idea. And how are you guys working on the projects now that everybody's working from home? More planning for whenever we can go back to university or?

I: Yeah, we do a lot of preparing for projects. We do some events, mainly online, they don't work very well as in person. We have more meetings with other good offices to understand what they are doing to exchange ideas. That's it.

J: Okay, then I'm done with my questions. Thank you so much for your time and help. I will stop recording now.

F. Paulo Almeida Interview**(i) Informed Consent Form****Informed Consent Form****Informed Consent Form**

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name:

Signature:

A handwritten signature in blue ink, which appears to read "PAULO S. ALMEIDA", is written over a horizontal line.

Date:

30/04/2021

(ii) Interview Transcript

University of São Paulo

Name: Paulo Almeida

Nationality: Brazilian

Job title: Professor and Lawyer – Environmental Law / Green office Coordinator

Academic Background: Bachelor's degree (Universidade Presbiteriana Mackenzie); Law Master's degree Law (Universidade Presbiteriana Mackenzie); Doctor of Law (Pontifícia Universidade Católica de São Paulo); Postdoctoral Visiting Scholars – International Law & Legal Studies (UC San Diego School of Policy & Strategy).

P = Paulo & J = Jheny

J: Why did you decide to go into this field?

P: I decide to go into this field because I work with the law and sustainability in the high education the campus well-being.

J: Was there any particular event/occasion in your life when you have decided that you want to fight for the environment and switch to green?

P: None, specially. I had have been interesting in research about environmental law, since my degree in Law.

J: Are there any sustainable-related projects you have worked/are currently working on?

P: Yes, I am. I'm researching about SDG in São Paulo City and how there is the influence of university initiatives could contribute with then building the best way toward sustainability, also I have been offered classes of Environmental Law for environmental management undergraduates.

J: If you could define sustainability in a few words, what would say it means?

P: That's a good question. I mean sustainability could be known as the value and social way to building best way of life with equity, collaborations and responsibility for use and consumptions of goods in society and environmental for now and the future generations.

J: How would you describe green strategies? What does a strategy to be considered green?

P: Green strategies could be comprehensive as mechanism to improve the public policies to make introductions to quality life on suitability with resource-efficient and competitive economy to push up ways for use the environmental resources and best well-being, like achievements on environmental protections, best education system, and social and economic equality as well.

J: Which EU sustainable policies/initiatives are aimed at green strategies for high education institutions? Are they truly helping to implement green strategies?

P: Yes, they are. I choose one: the sustainable mobility policy because it can promote good impact in local community, includes high education as well. I think good public policies - when it has been well made - it contribute and involve the people with the real ethics actions for best consumptions, protocols, and agreements. So, these initiatives building and splitting the atmosphere, which reaches up in the academic communities and high education because it makes the sensibility of better integration, exactly as mobility system must propose.

J: What are the challenges of implementing green strategies in higher education institutions?

P: I mean the principal challenge could be there is no planning or there is no policies to insert in the academic governance a kind of interlace to community. In USP this experience has been demonstrated a great cultural incentive for more participation, and comprehension of sustainability beyond public social mandatory or necessity.

J: How can the local government assist higher education institutions to implement green strategies?

P: I mean that local power must keep the constant dialogue with the high education on new technologic push up the possibilities of partnerships. They can promote opportunities in training and in the public department also in financial supported when possibility. In conclusion: they all have to keep being "participative".

J: For you personally, what could be the most important step for higher education institutions when implementing a green strategy?

P: I think the one of most important initiate to make the green strategy of implementation is the control about the solid wastes and building the culture of reduction waste, and incentive the recycling them, when it is needed. As a good example, I think the policy in USP works very well for incentive and promote community engage for it.

J: For you personally, what could be the most difficult step for higher education institutions when implementing a green strategy?

P: To be honest, I think there is no great difficult to higher education institutions implementing a green strategy because there is in society a great interest in actions to sustainability, especially for reductions of waste or environmental education.

J: Do you have any suggestions about small/not so costly changes higher education institutions could implement in a short-term to be more sustainable?

P: Sure, I can suggest first in implementation the large communications of importance of waste segregations with international recognize differential of colors in garbage basket; second, reductions in energy consumptions whit use solar light for example.

J: How could higher education institutions involve their students when implementing green strategies?

P: I mean the good way to involve their students invest financial in researches of sustainability or building programs that involve the local communities with vulnerably people to improve sustainable culture about less consumptions.

J: The goal of the new European Green Deal is that by 2050 Europe becomes the world's first climate-neutral continent. Do you personally think such a goal is achievable? Why /Why not?

P: Yes, this is possible. However, it depends on the challenging in the culture of industries in Europe and the consumptions people habits. But, I can see the renewal of the plant cars toward electrical cars, although we have a great problem with the disposal batteries.

J: As a student, do you think one would have the means to introduce the idea of green strategy in the university she/she studies at? Why / Why not?

P: Alright. I think the students have great power to introduce good ideas in green strategy when she/he sharing the ethical action examples and asking the teachers to drive experiments or discussions of them to induction on new problematization about how the institutions could be better in sustainability or green practices for attending the demands of food consumptions habit in campus, for example.

J: And that brings us to the end of the interview. Thank you so much for your time!

P: Thank you!

G. Eleri Davies Interview**(i) Informed Consent Form****Informed Consent Form****Informed Consent Form**

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

The interviewee has allowed me to include the following information on the interview report:

Nationality

Job title

Academic background

The interviewee has allowed me to record the interview

If you agree to take part in this study please read the following statement and sign this form.

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I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:


All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: Eleri Davies

Signature: 

Date: April 28, 2021

(ii) Interview Transcript

University of Victoria

Name: Eleri Davies

Nationality: Canadian

Job title: Sustainability Coordinator

Academic Background: Bachelor of Arts (Honours), Geography; Bachelor of Science, Ecological Restoration; Master of Science, Sustainable Development

E = Eleri & J = Jheny

E: So, yeah, my name is Larry Davies, I am the sustainability coordinator at the campus planning and sustainability office in the University of Victoria, which is based in British Columbia in Canada. So, my role at the office really is the implementation of our sustainability action plan. So really this looks at or really like it comes down to two rules, essentially. So, the first one being that I facilitate with other departments to ensure that they're meeting their sustainability targets. So that could be anything from energy, greenhouse gas reductions, all the way to waste management practices. And then on the other side of it, part of my role is the development of pilot projects to allow us to reach our goals as a university or to kind of establish new goals. So, for example, one of the pilot projects I'm working on right now is the development of an employee purchasing program for electric bikes to reduce the demand for transit as well as single occupancy vehicles.

J: And this project is only for, for the staff members, or also...?

E: Just for employees and faculty or staff and faculty. So, it will allow staff and faculty to purchase an E-bike through a selected supplier, and then they'll actually pay back to the university through direct deposit. So, we're looking to launch this program in the fall, assuming that we can access bikes, because that's the biggest take up right now.

J: Cool. Okay, thank you so much. I will start with the questions now. So, the first one is, what does the word sustainability mean to you? If you could define a few words, what does sustainability mean?

E: Yeah. And so, a bit about why I was attracted to the industry of sustainability is, I really come from a physical geography and environmental studies background, and that led me to do ecological restoration as my post grad, and really an ecological restoration, you are working on remediation. And I really wasn't enjoying that part of the, the that part of my work, because I wanted to work on strategies that were actually preventing the damage rather than going and doing the clean-up crew essentially. So really, after that, I went back to university and got my master's in sustainable development, specializing in economics. So, coming from that science background, as well as the

economics background sustainability to meet is really how to improve business practices or an organization's practices in their operations, to incorporate social, environmental and economics. So developing cost effective solutions that will prevent long term damage on the environment.

J: Right, perfect.

And what would you call a great strategy? What strategy has to be to be considered green or sustainable?

E: Yeah, I think, to be considered a green strategy, it really needs needs to address the interdisciplinary aspect of sustainability. So, looking at that triple bottom line strategy, and bringing that into practice. So, from my experience, the most successful green strategies at a publicly funded institution or private company really engaged with the stakeholders so that there is actually that connection between the strategy itself and the implementation of that strategy. And really, they need to be cost effective to make that business case for implementation. A lot of the challenges that we face in the public sector are that we are publicly funded and are often competing for resources on funding with other initiatives. So, what I found is that there won't be that investment into a green strategy unless you can really prove prove that it will be cost effective in the long run.

J: Okay. And can you think of examples, from initiatives from the EU or also from the UN, that could be aimed and help universities to be more sustainable? Yeah, more green.

E: Yeah. So, because we are a Canadian institution, we don't actually work under the EU sustainable policies or framework there. Um, so a lot of at the international scale what kind of guides our framework and our strategy development is the UN Sustainable Development Goals. And the IPCC report on climate change. These two kinds of international frameworks have really pushed that momentum and buy in at our university from the executive level as well as students. So really, it's kind of led to the let to like inspiring innovation for the university. A lot of our policies as well are federally driven. So again, doesn't quite work under the EU policies. But when we are implementing any of our strategies at the university level, we are looking to what's happening at the federal and provincial level for us. So, part of, for example, our greenhouse gas emission reduction goals are really aligned with the clean bc strategy of 30% reduction by the end of next year, and then looking to a 40% reduction, and so on until we get to carbon neutral by 2050. So yeah, because I don't work under the EU strategy. I can't weight/provide the answer that you're looking for, I guess.

J: Yeah, they would have Sustainable Development Goals, I think is the most common.

E: Yeah, so the Sustainable Development Goals are something new for the university, we've just really started to work under that framework. What is great about the Sustainable Development Goals,

is it allows integration across the full VP portfolios. So that allows integration across the operations, the research and the academic side, and really sets kind of its set strategies that no matter where which field you're working on, or working in at the university, you have kind of a guidance to reach a more sustainable kind of a guidance to kind of operate under a more sustainable framework. So yeah, it's it's very new for us to be working under the SDGs. But it's very exciting, because it does kind of bring that integration to us.

J: Okay. Now, the next question is sort of connected to this one. So maybe you can think of how it was before implementing the SDGs in the SDGs at the university. So what do you think was the most challenging part? Was it because it has to come from top to bottom? Or is it because it has to be a long-term plan? Also, for universities that don't have any green strategy, what would be the most challenge part?

E: So the campus planning and sustainability department, we do focus exclusively on the operation side of the university. What we are finding right now is we are just starting the development of our climate and sustainability action plan. So this takes a more comprehensive approach to climate strategies and what we've previously done. And to do that, we are really focusing on integration with the research and academic units. One of the biggest challenges is really bringing these three, three different groups together, or these three portfolios together to develop a vision for the university that kind of meets all of our goals as are kind of individual units. So it's definitely it's a more time consuming process working on integration. But ultimately, it will allow us to kind of implement the Sustainable Development Goals across all of our portfolios. One of the biggest challenges working on the operation side really comes down to resources, both on the staff and the staff and the financial side of it. Again, because we are publicly funded, we are competing for funding resources with all other departments. So there is there is that challenge of how do you implement strategies when we are on such a limited budget?

J: Yeah. Okay. And does the university get any assistance from the local government?

E: Yeah, so we're about 75%, funded through a combination of provincial and federal funding. That's pretty consistent for Canadian universities. Our department specifically we do have very strong relationships with our local government here in Victoria. So, whenever we are working on a plan itself, we're looking to see what our partners in the municipal governments are doing so that we can align what our strategy on campuses with the bigger picture. I think one of the great examples at the university in which we have collaborated with local government is our campus cycling plan. So, this is actually a first for Canadian universities to have a campus cycling plan. And with that we were developing and all ages and abilities network for cycling and active transportation that would link to the district of Saanich, with the city of Victoria and Oak Bay municipality, which are three local

governments, so all of the network improvements that we're doing on campus, are linked to those future improvements happening in the community.

J: Do you think it's important for other universities to seek this assistance of the local government? Would you advise that as one of the ways to become more sustainable?

E: I definitely think it has, yeah, I would recommend for universities to work with their local municipalities. It allows you to leverage a greater momentum, kind of more, more resources. It also makes sure that what you're doing on your campus community, is linking to the strategies in the bigger group, the greater community. So it's, I mean, I think in any field, collaboration is key to the success of a project, but particularly in the sustainability field. Collaboration is where you really are going to come out with the strongest strategies in the end.

J: And the next question is, again, for universities that are not working as strongly as the University of Victoria in the sustainability field. So, what do you think could be important step for them to initiate such a strategy? I had some interviewees that, for instance, they mentioned that starting a green office, if they don't have yet, starting a green committee, maybe creating events that raise awareness for both students and staff. So, can you think of steps that could be not so costly and simple?

E: Yeah, definitely. Yes, because we have been established for almost 20 years, our department, we are sitting in a very good position where we're well known across the campus, and we have lots of partnerships across the campus. I think for our institutions that are just starting out to develop a sustainability position. What's really useful is looking towards what student groups already exist on campus. Because there you can really inform the direction that you'd want to move or go in as a sustainability office. The other kind of resource to tap into is actually the faculty members. Again, they are the experts, or they have the expertise in a lot of the technology research that's happening in the sustainability field. So, it's just, it would be such a mistake to not use those two groups as resources when you're starting to look out to your planning phase.

J: What do you think would be the most challenging part of starting a sustainable movement?

E: I actually think one of the challenging parts is finding where this unit or department fits in the kind of bigger organizational structure. So, at the university, we originally started out as a unit under the Facilities Management Department. And then about 10 to 15 years ago, we moved across to the financial office. And really, this allows us to be kind of more involved in the planning of the university, so that we're more integrated into the future development of the university. So I think finding, finding where the fit is, at the bigger organizational scale, and like the hierarchy of this organization, is really

it's difficult to map out. There's definitely other universities that have stayed within the kind of facilities management realm that are very successful in their campus planning or sustainability departments. And then I've also seen other universities that have created almost a hub of a sustainability office, where they are bringing together the research and academics and operation side all into one kind of cohesive unit. So, it's, there are different frameworks that work. I think just finding the one that works for you as an institution is probably the biggest challenge.

J: Yeah. And other challenges that a few interviewees mentioned, is changing the mindset of the staff. So, for instance, you do have some professors and some lectures that they don't really understand what sustainability is, or they don't think it's such an important issue to invest so much money and yeah, energy on that. Do you think this might be an issue for other institutions? Do you agree?

E: Yeah, definitely, um, one of the challenges that we face is bringing that human dimension to sustainability. So how do you equate kind of the university's greenhouse gas emissions to, to an individual scales so that people understand what their impact is and what their actions are? I think because there has been a big push in BC to develop climate strategies, we are lucky in that majority of our faculty members and majority of our students are already interested in the topic. But it, it is very challenging to bring that level of in the day to day actions that I take, as an individual really do play out to have a big impact on the university. And it's I think that's part of the big communications piece that our office has been working on. One of the projects that we work on is equating a single use cup that you use daily to the overall impact on garbage. And that brings it back to the individual or behaviour changes that a person can take each day to have a bigger impact in the community. So yeah, it's definitely I can relate to other universities saying that that's one of their challenges.

J: Yeah, and what you just mentioned about the cup could be the answer to my next question, which is a small changes that are not so costly that you think universities could start implementing. And in this question, I had other interviews saying that they don't think it's worth spending time on short-term strategies, they might as well spend the whole year or two years planning the whole business plan. So, do you think it's worth spending time in those small changes?

E: Yes, absolutely. Yeah. Short answer. Yep. I think that, what did the so sustainability obviously, if you look at GHG strategies, those are very techno centric strategies, they're very costly to implement. So, they take a long time to actually have the GHG reductions that you would want. Whereas another component of sustainability is that behaviour change really can influence the outcomes of reaching your targets or your goals. So even though the university we have the kind of technology, kind of techno centric approach approach to reducing our GHG reductions, we also do not kind of exclude the behavior changes that individuals can take to reduce their personal GHG reductions. And at one

person scale, obviously, it's not going to make a big impact to the university. But if you have 20,000 students doing it, suddenly that has a big impact. So, I think you do have to find that balance of creating the long term vision. But you do need to break it down into those short-term strategies. And really, sustainability is an iterative approach, you're, yes, you're looking to that 2040, or that 2050 goal. But if you're just looking towards that 2040 or 2050 goal, you're not actually looking at the two-year blocks to get you to that goal. So, I think some of the bigger or the smaller projects that can be very easily implemented on campus are removing single use plastics in food services, by switching to reusable containers program, it's a onetime investment upfront to buy into that program has a big impact on the waste of the university. Another one is just promoting active transportation and sustainable transportation options that really comes from a campaigns approach rather than kind of a planning approach. And again, not only does it impact the parking demand of a university, but it also impacts the commuting the scope three emissions from commuting.

J: Yeah, that's a good one. And how can the university get the students on board? How does the University of Victoria do that?

E: Um, so part of our sustainability action plan, we have engagement goals that are directly linked to our other goals of energy waste dining services. So, we invest quite a bit of our funding as a department to our campaigns and our engagement with students, staff, and faculty. Additionally, we have a very strong partnership with the university's communications and marketing department. And they really work with us to reach a wider audience for any of our general promotions that we're doing. The other kind of resources that have allowed this to be successful for us is having a staff sustainability network. So, these are staff members who don't work in the realm of climate change or sustainability, but have a general interest in it, and they attend monthly meetings with our department. And then they're the ones that actually take that initiatives to their teams or their units or their departments. And they implement them at their kind of at their units are at their departmental scale. And this allows us to access individuals that we wouldn't maybe access normally. It allows us to kind of have a little bit of a passive approach to how we're implementing strategies. And really, each year that we do the stuff sustainability network, it does grow in membership. So, it's, it's a really great way to kind of take the pressure off of us as staff members of the sustainability department by giving people the autonomy and the resources to implement sustainability at their departmental scale.

J: Okay, and Is there like a central office or board that is run by the students? The green office or any sort of organization like that within the university?

E: Yeah, so the university has this ubik student society society. So they're elected members each year, the student group is really involved with sustainability. So they are implementing initiatives that

kind of just target the student group. As our department, we do collaborate with the the UBSS as much as possible on campaigns. This past year, we've been working on a waste campaign with them. And that allows both, it's very mutually beneficial for our department, as well as the UBSS group as they have access to our resources in developing campaigns. And then on our side, we have access to a larger network of students.

J: Okay. And the next question is about the European Green Deal. So, as you probably know, the green the goal is to be the first Climate Neutral continent. My question is, do you think is achievable? And why? Why not?

E: Yeah. So again, because I don't work under the EU Green Deal. I'm not familiar with their specific strategies outlined in it. What I can kind of speak to is a lot of the newer technologies that we're exploring in Canada that on kind of the building scale side, so he exchange pumps, kind of passive house are all really European based technologies. So, the fact that North America is tapping into European technologies and starting to bring those online here, yeah, I do think that the EU is in a good position to become Climate Neutral. Obviously, it's going to take a large investment in research and development into this technology sector. But not just looking at the techno centric approach, it really will take an investment into behavioural changes as that also is that link to bringing that stakeholder engagement, that audience involved in the climate strategies. So yeah, I think that the fact that you're already more advanced in technologies than North America, I think that's a huge advantage.

J: Yeah. And do you think that for universities, again, that don't have any green office don't participate any sustainable projects or green strategies. And then the students have the willingness to introduce such, do you think they would have the they have the power to implement such green strategies and start talking about it?

E: I think students don't realize how big a voice they have in this. As universities, really, what it comes down to is as an institution all universities are there to serve the students. So, we, as staff on the admin side, a lot of the work that we do is to enhance the student experience, whether it's through their education or creating that environment for them to thrive. So as soon as students are able to kind of band together and express that interest and that desire for universities to have climate plans or sustainability strategies, I think that they're really, really will have that power to implement it. You know, at our university are at UVic. We, we have very active student groups, and they really are pushing for stronger climate plans at the university and what we're doing with the climate sustainability action plan that's been largely driven by student voices and a desire to respond to the climate crisis that's happening on a global scale. And without that kind of push from students, we

would still be operating as kind of an operations focused sustainability plan. So, it really students do have that drive and that power to influence change. And it's, it's them, it's up to them to kind of realize that they have that Yeah. To organize themselves.

J: Do you think this would be different from foreign universities from the Western or the East, or it doesn't matter where they are, which continent they are, which country they are, if they have a willingness to help?

E: I don't think I think the fact that the Friday climate strikes, we call them here, but maybe it's called something different in Europe. The fact that those began from one student speaking up, and then that grew across pretty much every continent, and the climate strikes that we had in Victoria, really did influence our department to start the climate plan. So, I would imagine that it would be consistent from North America to Europe for students to really become involved in it.

J: Okay. Well, that brings us to the end of my interview. Do you have any final remarks or anything that else you'd like to say?

E: No, I am, I think that's probably it. I do need to sign the consent form. So, I will get that back to you today.

J: Yeah.

E: And I will send you the recording as well. It might have to come through a Dropbox file. I'm guessing if it's a little bit too large over email, but I will figure out a way to get that to you.

J: Yeah. Okay, thank you so much for your time.

E: Yeah. Thank you. It was nice to meet you.

J: Good stuff. All right. Take care. Nice meeting you too. Take care. Bye bye

E: Bye

H. Corey Peterson Interview

(i) Informed Consent Form



Informed Consent Form

Informed Consent Form

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

The interviewee has allowed me to include the following information on the interview report:

Nationality

Job title

Academic background

The interviewee has allowed me to record the interview

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: Corey Peterson

Signature: *Corey Peterson*

Date: 05/05/21

(ii) Interview Transcript

University of Tasmania

Name: Corey Peterson

Nationality: Australian

Job title: Associate Director, Sustainability at University of Tasmania

Academic Background: Bachelors Biology and distributed science (Gustavus Adolphus College); MSES/MPA Environmental Science and Public Administration (Indiana University Bloomington).

C = Corey & J = Jheny

J: It is recording now. So first, maybe you can start telling me, what do you do, a short introduction of yourself. What exactly to do at the university? And then we start with the questions.

C: So my name is Corey Peterson. I'm the Associate Director of sustainability at the University of Tasmania. I'm also president of Australasian campuses towards the sustainability sector organisation that has membership of all universities in New Zealand. And I think we're up to 90% of universities in Australia. So, I'll be answering questions probably usually in my UTA's role, rather than the presidential role, but it depends on the question. My is also so that's my official title, my role is to lead. It's a fairly new initiative called sustainability mission integration for the University of Tasmania directed by our Vice Chancellor and president. And that is to ensure that the entire university community understands what they can do to ensure that we become what he says "the most sustainable University on the planet". I said how about we just try to become one of them? So that's generally who I am. Yeah,

J: I'm talking to the right person. Yeah. How long I've been working at the University of Tasmania?

C: So I'm just coming up on 11 years.

J: Okay, nice. So my first question is about stability. So, what do you think sustainability mean to you? How would you describe the word sustainability?

C: There are hundreds of definitions. So, they have settled on the Brundtland Commission definition, which is multi generational and all of that. I guess I clarify, for people when I'm discussing sustainability, they need to understand the context that I look at it, it is not the three concentric Venn diagram circles, where the equal in our economy, society, and environmental are all equal. and sustainability is what you do in the middle. I use more of the SDG approach, which is the concept of the big circle is the environment, then you have your society, and then within that you have an economy. And that that shows the interdependence as well, environment can succeed just fine without the other two, but economy cannot AT ALL without the other two.

J: Perfect. And how would you describe green strategies? What can be qualified as a green strategy?

C: See, and this is this, this is where you, if you, if you look at sustainability, as holistically as it needs to be a green strategy can be almost anything. Because a lot of organizations focus a lot on financial sustainability when they talk about it, or they're just talking about environmental sustainability. And what gets lost in the middle are a lot of the socio-cultural sustainability elements, which are necessarily very contextual to place. So here in Tasmania, you know, we're working very hard to recontextualize ourselves with an original perspective as well within how we do things and relate to our landscapes, our societies, how we do things, economically, etc. So that's really, what I guess I would say is it's everything. But it's understanding that everything is connected.

J: And do you think that because many things can be called green strategy, we might run into the green washing? Because I feel like a lot of companies like to use this, this word, this terminology, green strategy, and sometimes it's not so green.

C: No, exactly. And we here, like, avoid using the word green, because we have Tasmanians with a green party started. And there's a strong association when you use that color name. Yes, it's a political element. And some people will turn off or become antagonistic, immediately, even subconsciously. So, I talked about sustainability or resilience or you know, anything but putting a color to anything. So, green strategies, I think most people would immediately think you're talking about environmental sustainability, or that's giving them a lot of leeway. They probably think you're talking about environmental management, or just environmental compliance, really, you know, those different levels of understanding about where the impacts are and how you, you internalize your externalized impacts as well. Yeah, we can come back to things because I'll just start talking. And I won't notice it.

J: Yeah, okay. That's good. And when you think of the EU sustainable policies or any initiatives also including the UN, can you think of any of them that could be applied that could be implemented at universities? For instance, any strategies that you that you guys have at the Tasmania university?

C: Yeah, so we started a holistic, well, initially, we started with a focus on things that people weren't too threatened by, I guess, in their thinking. And that was around just general waste management and getting recycling, and we should support support, sustainable transport options, active transport, bicycling, you know, public transport, then you start to broaden up your understanding of what sustainability really does entail, those are important elements of it, because they have health and well being outcomes and all those sorts of things, environmental impacts, and he start to broaden their understanding of how it all ties together and the decisions they're making. And I'm sorry to repeat your question again, I just digress myself into somewhere. What was the question again?

J: So, I was saying, which EU policies or maybe UN

C: Oh, yeah, yeah, that's right. That's great. Yeah. So we looked at things, we picked tools that were very holistically focused so that we could broaden people's understanding, that's where I was going with that. So the Sustainable Development Goals are named up in our university strategy, specifically that we will operate in relation to those. And then he said, "Okay, well, that's, that's great, but how can we actually track assess what we're doing?". And so we use the sustainability tracking assessment and rating system, which is called STARS. And then we also, of course, participate in the Times Higher Education Impact raking, just tied very closely to the SDGs, and to the STARS categories, you know, any of those that that look at sustainability holistically. But those are the ones we've settled on, because, you know, they meet our needs, and then their communication device and a behavior change engagement tool, as well.

J: Okay, and for universities that are not so sustainable, that are still on the initial phase, what do you think would be the most challenge part when implementing green strategy?

C: I think most of them, what is a first enabler is the concept of environmental compliance. And that allows them to use and, and I did that here, in a way, you know, we need to comply with these federal or state regulations and laws. But we have to report against them. Okay. So as long as we're doing that, why don't we actually turn it make it more positive, and let's focus on instead of environmental compliance, environmental management? So therefore, you're looking at, okay, how do we minimizing our negative impacts and being a little more proactive, then I could start talking about environmental sustainability, about having truly positive impacts in the choices we're making. So we're not just compliant, we're going to that next step to deliver positive outcomes for our communities in our environment, then you could say, "Oh, look at that, we're not only having positive outcomes on our community", but this could have positive outcomes financially for the university or economically for our communities, or even just a cost reduction, you know, for not sending everything to landfill and the landfill Levy, you know, the more we, the less waste we produce, the less cost it is, and so you just slowly roll them along, until they go. Okay, so now you've talked about environmental sustainability, now you're talking about socio environmental sustainability, and you're tying that into financial sustainability. There's a holistic tool that we could use for this.

J: Then you also mentioned, the community. So how do you think universities could, get help from the government? Or basically, what would be the role of the local government into assisting higher education institutions to become more sustainable? Do they play a role?

C: Well, one is how I started and sure that there's some compliance requirements. My government here in Australia is not so good at that. But our local government is amazing. they've introduced for all catering outlets in the city of Hobart, which are main campuses in the city, no single use plastics

can be used in any of their catering. And they they sort of phase that in. And I think it's the middle of this year when everybody has to be using compostable packaging. And so that's made it easier at the university. I just thought we have to comply with that. So other universities, you know, governments at all levels can actually put those in is really important levers to start the conversations that then I walked you through earlier. You know, you start with clients focus and then you say, okay, there's demand from our students and our staff as well and you start to show that people do care and that we're responding to the needs of our community. And this is how you do it. And you always just sort of that next little step. Now, that's an incrementalist approach. And we at the University of Tasmania, I think, are really now at a step change. point where with the Vice Chancellor and the Vice Chancellor, he's been in two and a half years now. And he's good, basically given us and me with the lead as the imprimatur to make some significant forward steps no more of this little, you know, horrible recycling bins and like loops in it, how are we changing how we choose to do everything. So he backed us rewriting our sustainability policy, to be just principles based, there's nine principles that will guide everybody's decision making at the university, and they need to show that, that they're not that the decisions they're making are informed by that policy, and just show that they're not making decisions that are contrary to that policy. So yeah, it's a bit of a tool as well.

J: That's an impressive system. I wish all the universities could implement such. And what do you think would be the most important step for universities when deciding to be more sustainable? And what I mean by that is, do you think that for instance, we should start from the students so like I said, from the needs of the community, and, and the students to show that they actually care about such matter, or it should come from, from the top bottom?

C: Sort of like governments follow, a lot of leadership follows when they realize there's an issue. So I think it's important to highlight there's an issue now, whether that we're not complying with, you know, our rules and regulations, or we're not meeting the needs of our staff and students? And how do we know that? Well, we've done surveys, and we've done focus groups and whatever, and, and just starting to make that case, and then present them a solution that, that meets all those needs, and takes it that next step is you need to make it easy for people as well. It's like, well, this is what we need to do. And they're like, all right, well, that we can't afford to do this year. But we can do it next year, you know, that sort of thing.

J: And do you think has to do more with changing people's mindset, because another interviewee that I had, he mentioned that sometimes the students have the willingness and the community as well, but because the university is formed by teachers and lecturers who are from another generation, so sometimes they don't really understand what sustainability is, or they don't see that this is something that the university should invest time and money on.

C: That's Yeah, that's a good point. Because some people do get very focused on their area, they just do research in this, what have you. And that's what is the broader thing. And in that case, it's important to pardon the phrase, use peer pressure. If you're finding, you know, that you've got professors or lecturers that aren't getting it, or aren't being supportive, have other professors or lecturers. So, I'm not a professional staff ever, not somebody that they don't necessarily see as a peer. Have a conversation with them or, you know, express support for what you're trying to do. You know, especially somebody with expertise in that area, knows that, you know, there's an academic. It's not with everybody, but what's the word? Arrogance is the wrong word. But it's an academic perspective, you know, that they know everything about their thing, or the broader thing. And so sometimes they need to hear it from somebody else that they respected that level. Yeah.

J: Good. Do you have any suggestion of small changes or changes that are not so costly that universities could implement in a short-term? Or you could also say that you don't think that that's a good investment that you'd rather have them make a whole year plan and spend some money and some time and implement the long terms implement their long-term strategies instead?

C: I think it's good, even if you don't have the approval for a long-term strategy where it's signed off, that anybody in this profession needs to have it in their head, that vision of where they're trying to get their organization. And yeah, and sometimes you have to step people into that. So, I mean, when I started, I was hired because there were no recycling. There's no recycling at all at the University of Tasmania 11 years ago. Okay, that is just phenomenal. Right? 11 years. years ago, it was like, oh, Corey, you need to, you know, and they thought it was just really a hard thing to do. And it's like, well, you're making it really hard thinking it's hard. And you know, so you just had to come in and put it on the table, okay, we need to buy this many bins. This is what the servicing will cost and just get get all the facts and figures on the tape. Yeah, and they just nobody had time to do that. And that's, sometimes it's providing that bit of information will bring people along, and they realize it's actually not as hard as we think. Because sustainability is still not so much here now seen as an extra an add on, you know, it's an added effort, it's an added cost, it's an added whatever. It's not that what one needs to do in this profession is it needs to become integral to what everybody is doing. And that's that has now after 10 years, got us to that sustainability policy where it's a principle based. So, in a way, we've responded, by developing that policy and putting it in to what people wanted, they wanted permission to make decisions that were not just based on the cheapest thing they could do. For you know that that short-term money saving, our principles are these things where a university university has been around for, you know, 1200 years or whatever. It's a model that works, we're going to be here, we need to think long term, we need to demonstrate for our communities, longer term thinking. And that's, I think, once you start to remind people, the mission of their organization, in this case, higher education, you get a different listening, they hear you differently. And it's going

back to the values, what are the values of your, of your university, and they're always about leadership, knowledge, best practice trying to do things, you know, research base of the evidence base, you know, and you just sort of make sure you put it in the context of what's important to why that organization exists in the first place. And of course, nowadays, especially in the Western world, the universities, students are sometimes I don't like the term looked at as customers or clients, but they are somebody you need to respond to what do students want? And what and what do students need as well? Because sometimes they don't know. But they know they, they want to live in a sustainable future. Well, how do you enable that? How do you say, Okay, what can we as organization do to meet that need, in the curriculum in what we're researching in what they see where they live, and you know, the classrooms they come into, or their recycling bins or their you know, or their messages that says, we save power? Look, the lights are off when we come into a room, and they go off and we leave, you know, all those little things that say, we're trying to do what we can.

J: And you mentioned other students, so how do you think universities could evolve more than students? And make sure that it's also priorities for them for the ones that don't really think that sustainability is something should be something invested on? And also, the ones that haven't the willingness to help? So how can the university actually take all those people on board?

C: Yeah, so there's an again, it depends on the structure of your university, but like, we have a sustainability Committee, which is representative. So, we have academic professional staff, we represent all the disciplines, we also have student representatives. So these are students that are elected by the students to their student union, what is called Student Association, and they then say, we say, Okay, we've got two spots on this committee for students, you're the elected student representatives, who do you want to come to this committee meeting, you know, five times a year, and you make decisions, and you tell us what to do, and we report back to you. So that's one way. So that's that really formal way then we have, okay, so that's just students in general, then you have the students who are really engaged around sustainability and want to take it just that next level. So we've established students for a sustainability group. That is it's, it's any student that's interested in sustainability is involved in that. And we have a paid intern while student fellow we call themselves a second level intern. And they get paid to facilitate that group and that student voice, and they also come to the sustainability committee. So, you have general students, and then then we have these that are really focused on sustainability and they're just a little bit more informed. But again, they're the converted whereas the other students might not be the converted already, which it's important to get both understandings of that voice. And then you get the converted students that already know sustainability matters. They're talking to the other students, the students aren't hearing about sustainability from me as an old man, you know, from their peers. Yeah, that's really, that's really important. And that's the voice that we give them every year, it's codified into our hierarchical

structure, we've created an adaptive network structure of students as well across all the colleges and schools. And then we encourage them to talk together, then there's another level, that's anybody who's an on-campus student that's living on campus. So there's this whole residential group that we engage around sustainability, because you can engage differently with them. Because it's every aspect of their living, that you can use our touch points in around sustainability, whereas the others you're dealing with their touch points into their curricular activities, or, you know, anything, the teaching, learning and research, but you're not necessarily getting them, how are they living at home, you know? That's just, that's a different level. So that's a different group of students that we can engage at a whole different level of life skills around sustainability. And then of course, that goes out to other students as well, because they see that happening. Then we have another thing called the communities model, which sustainability is one of the five theme areas. And that's its goal is to engage every single student at the university, in creating community and being part of the community. And so sustainability is one way they do that. So they do, you know, volunteer days where they go out and pull weeds around campus or in the neighbouring communities or pick up trash or do, they did the wild pollinator counts last week around biodiversity. And we just have a whole, all those things you think of is sustainability related, they have activities around that. And that's my team runs those in conjunction with the student experience team, which is a whole different part of the university. It was one other things I mentioned around student engagement. Also, yes. And then of course, we run our own student sustainability integration program for students, which has curricular elements. But it also our main focus is the paid internships, and fellowships and then hosting interns from other parts of university. So, we have anywhere from 17 to 25, paid interns every year. And they were one run students versus sustainability network. Other ones are doing major waste audits and running our waste auditing system, we run the green impact program, which I know is the name, but that's what it's called. And that's what we're just leaving it. And then we write reuse programs, and all sorts of these sorts of things. So, there's, there's all these different touch points into the community. So, we want to offer those students that are really engaged in sustainability. So they've been involved in students for sustainability group, then they can apply for a paid internship so that you know, they need to come and sell themselves, and how can they contribute back to the university with their skills, and we'll pay them to do that. And then if those interns, those that are interested, can apply for that next level, which is the fellowship that's also paid twice as much time higher pay level. And then usually, I've been hiring them as sustainably Project Officers proper paid staff members are not students anymore. I mean, they're still students, but they, it's sort of career progression. And that's worked quite well. For a number of our students, actually, it's been really a neat program to see them grow. And, and then they go, and they leave us and get jobs out in the world. And it's here you go, well, opportunity for the next one.

J: That's impressive. The students have no excuse. If they want to get involved. There's always a

way in the Tasmania University. You can be partially involved formally formally paid. Wow, that sounds like a dream for every university.

C: 11 years building. Yeah. And we just got the recognition from our senior management, that given me another \$100,000 a year a strategic funding to hire that many more students and support them with staff time and project efforts so that they committed five years of additional monies. And the best thing, those monies are coming from our new because we have divested fully from fossil fuels. So we're fully divested university, or will be by next month, there's only I think, \$3 million left or something they have to get out of that there's positive investing. So they're investing in companies that are delivering a sustainable future and they have committed that 100,000 from profits, I guess, whatever that you get from the year since dividends are going directly to this program so we can map it directly back to our investment choices to create a better world to money coming back to pay our students for those experiences so they can go out and become sustainability leaders themselves.

J: Wow.

C: I can't believe 11 years ago, I was like, oh God, recycle bins, what am I doing?

J: So many things changed in only a decade. That's amazing! And are there any programs are there also programs for the staff to encourage the staff to be more sustainable. So, for instance, going by bike, you get some sort of points or...?

C: Current currently nothing like that yet. We're about to introduce salary sacrificing for those that want to buy an E-bike, electronic bike. So that's what's supposed to be in place. Now, I haven't seen that the official announcement, but that's what's happening. Yeah, run the green impact program for staff. Now, that's a UK based system that start with the National Union of Students over there. And then x where I'm the president of, we sponsor that program in Australasia. And every year, we get more and more universities joining it, and the number of teams and all the things that they can do. And then we have awards and prizes and things like that for those activities. And this year, we've just introduced for the first time ever vice chancellors award for sustainability. So yeah, so that's pretty excited to see who gets that this year. Obviously, nobody from my team qualifies. I've made I've made that really clear, by the way, we won't be nominated. No. Yeah. So those are some of the things that we've done. Yeah. Oh, and we're introducing a peer-to-peer staff program. So this will basically train the trainer's and we're doing that for staff and students around sustainability. So that'll be another way to engage. Everybody at whatever level is comfortable for them.

J: Awesome. Well, I'm impressed. I'm speechless. I want to study there. I am moving to Tasmania

C: Once you're here, you don't wait. You know, how wonderful it is. What part of the Netherlands are you in?

J: I'm in The Hague. But um, I am originally from Brazil.

C: Yeah. Alright.

J: So, for me, I was like, well, the Netherlands is very advanced, especially when it comes to the sustainable aspect. And now I'm like, maybe so that much. They can always do more.

C: They are they can do their Yeah, they're my transport. They're my idol. But yeah. That Copenhagen and stuff like that. You just like highways connecting cities and stuff. Yeah. Just this bike. Love it. Wish we had that. We are getting there.

J: Yeah. And as you probably you're probably familiar with the European Green Deal. The main goal is to be the most the first Climate Neutral continent by 2050. So, my question is, do you think that such a goal is achievable? Or not and why? Is it too ambitious?

C: No, because it has to happen. And it can't just be Europe, obviously. And and I think that's way too late. But as long as there's interim targets, that's fine. and Europe very much leads in this space on the globe, so it's great that they're doing this and that they're sort of imposing that on their trading partners as well. I think it's very useful, because that's getting getting a lot of traction here in Australia, because we've been quite the laggards in this space, because are very conservative, coal based government. Yeah, so I think I think it is very achievable. But it's not going to be easy. There's a lot of systemic changes that will have to happen. And we will have to question some of the basic tenets of how we we live, especially in the West.

J: Yeah. And I had an interviewee from Poland. And one of her remarks was that when you live in the western side, because she's now living in the Netherlands, it's really easy to say that is achievable. But when you come from Eastern Europe from both Poland, Hungary, where sustainability is not their main issue, some people really frown upon such strategy because they think we have other issues that should be prioritized. Sustainability, yeah, the environment is important, the planet is important, but what about the healthcare? What about other issues that seem to be more important? And then we mentioned that of course, the EU is promised to help all those countries that are a bit behind the the more developed countries in the EU. And she mentioned that even if they have the financial support and the program and everything, it still people are not going to be so open for such initiative. Because, again, why do we care about the planet? We have other issues that are way more important for society as a whole.

C: So that comes back to that I agree with you, that's a very good, good sharing from that person. And that's where it comes back to that model, that explaining what sustainability is, you know, that

that, sorry, economy is not equivalent to environment, you know, you just, you can't look at the world that way. And that's what I was kind of getting to. And yet, we really have to have the contextual perception change in much of how we do things and the choices we make.

J: And also has to be, I think, the hardest part is that people have to change their mindset, and that might take decades. Like you mentioned the program that took 11 years, and I think that's the most challenging part is changing people's mindset and understand that.

C: And yeah, and getting that and that's where I think it's up to your generation, in a way globally, to connect to one another, and listen to one another and say, "Okay, well, what, what is sustainability mean, for you in Nigeria, or you in Poland, or you in Canada?" You know? And it is, it is placed based, in many ways. But there are some basic principles. And the Doughnut model, you know, which are implementing in Amsterdam, you know, is, what's that livable ring? And anybody choosing to do things outside of that some hard decisions have to be made What What do you allow without creating a police state? You know, how can you still allow our freedoms and democracy and the things that we genuinely value in the West, to the broader needs and issues, people have to make informed choices. Therefore, you have to inform people, and therefore, you know, that's why I do my surveys. You know, it's it's much to get people's perceptions and support for things, but it's also to inform them, that these are important issues, you know, and that's, you know, and even just informing them about services and approaches that we're taking the students I didn't even know we had recycling walls until I took the survey. And I'm like, Well, you've got to have them where you live? Have you not seen them? But you never say that? Yeah, but you just go Okay. Well, the the surveys are an engagement tool, and an informed information to as much as you know, getting something back, you're giving something to the student or the staff member as well. And it's communication. We're all just saturated. So, I don't read email, stop sending me emails about it. And I'm like, Well, how would you like us to communicate with you? Oh, I don't on Facebook, either. And I don't do this and that. Okay. So, you expect me to come and knock on your door? You know, the 36,000 students we have at this university, whatever it is now, and, and the 5000 staff. "Mmm, okay"

J: I see your point

C: Yeah, so anyway, yeah.

J: Yeah. And then my last question was linked to with the comment from this interviewee from Poland, that she mentioned that universities back home, again, sustainability is not a priority. But there are small groups of students who do you want to make a difference, and who wants to wants to be more sustainable and take sustainability seriously. So, my question is, if you think, in such countries, also Brazil, back home, we have a lot of universes that still don't have the recycling bins. So how do you think the students could push forward this issue and actually make a difference? And

do you think that they would have the means to introduce a green strategy, the importance of sustainability to their university If if they're so yeah, way behind?

C: Yeah. Well, as I said, we were way behind. Very car focused. And, you know, it's just start with what you can change. So, you know, the students could say, "okay, in our school, we're going to introduce recycling, and we're going to get a couple of bike coops, and we're gonna start to demonstrate what we're talking about as a base level of sustainability". And then you just start building it up from there. And then people see what you mean by it, and what, what needed what needs to be there for infrastructure, what needs to be there for services, and then you know, you'll find one school, they'll have it and then these students from another school, so when they're doing it, you know, why, why don't we have this and then and then of course, the facilities group will say this, we can't have everybody doing something different. Let's have us centralised coordinated way of doing this. And then all of a sudden you have a recycling program at the University and then you buy some bins, and everybody's got the same. And then you say, Okay, well, that's not good enough, we need to have, you know, towards zero waste to landfill a lot of our stuff our students have proven in their audit, it's food. So why don't we have organic waste bins. So that we said, Now we've been introducing organic waste bins over the last 12 months. And that's now become a it's going to add by August, every building will have organic waste bins as well, so that we have less waste to landfill. You know, you sell that on lots of fronts, you know, it's a waste of resources. But we're a certified carbon neutral university, one of only two in Australia. You know, we were well since 2016, on a 2015 baseline. And so you start to use all these little bits of leavers to say, Well, if we let all this food waste go to landfill, we've got to claim the carbon emissions from that versus if we got it to a composting facility, then we don't have those carbon emissions and we pay for those carbon emissions. So there's a cost saving, you know, you just start to put it all together. Yeah.

J: Like, just facts and showing the facts and inform people. I am done with my questions. Do you have any final comments or anything that you forgot to mention that might be might add something to my research?

C: It's fantastic you're doing this project; I think that's really great. The interest is there, and that you're talking to people from around the world. That's fantastic. And getting those insights and sharing evenly shared from you, probably from Poland, and I'm sure you'll share stuff I've talked with you about with others as well, your report. So, you know, I think it's fantastic, what you're doing. I hope your instructors is pleased. You're doing as well. And I can't think of anything else at this point. But if you have any follow up questions, feel free to send me an email or something that I'll clarify or add further information if needed.

J: Yeah. Okay. Thank you so much for your time.

C: No worries, J. Take care yourself.

J: Take care. Yeah.

I. Rodrigo Zapata Interview

(i) Informed Consent Form



Informed Consent Form

Informed Consent Form

1) Research Project Title: Sustainability and the role of higher educational institutions

2) Project Description (1 paragraph)

This research aims to explore the role of educational institutions, focusing solely on universities, in the training of students and future professionals, concerning the insertion of the EU Green Deal and environmental education. The ultimate goal is to propose a guideline for universities that desire to become more sustainable and acquire a green strategy, taking into account not only the initiatives proposed by the EU Green Deal but also based on the sustainable actions that environmental-friendly higher educational institutions have already successfully implemented.

If you agree to take part in this study please read the following statement and sign this form.

I am 16 years of age or older.

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

All information will be treated in the strictest confidence. My name will not be used in the study unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

Name: Rodrigo Zapata

Signature:

A handwritten signature in black ink, appearing to be "RZ" or a stylized version of the name.

Date: 22/04/2021

(ii) Interview Transcript

Vrije Universiteit Amsterdam

Name: Rodrigo Zapata

Nationality: Spanish

Job title: Manager at Green Office VU

Academic Background: Bachelor's degree Law (Universidad de Vigo); Bachelor's degree Law (Università degli Studi di Torino); Master of Laws (Vrije Universiteit Amsterdam).

R = Rodrigo & J = Jheny

J: Perfect.

R: Yeah, I think it's now. Yeah, I think it'll be recorded. Yep.

J: Nice. Yeah. So, what do you do at university, Rodrigo?

R: Okay. Um, so let me introduce myself. My name is Rodrigo Zapata. Ah, I'm 27 years old. And I'm working at the green office of the Vrije Universiteit Amsterdam, as the manager. And yeah, it's, it's a work that is really, really, really fulfilling, I think has a lot of meaning behind. And it's also an excellent way to keep in touch with the with the community that live in the university. And also to do a lot of good not only the university, but also even with third parties, and even at the student accommodations where your students are living pretty much. So this is, yeah, it's just a great opportunity to do a lot of good whenever these agreed offices is established.

J: Yeah. And how long? How long have you been working there for?

R: I've been working there for one year and two months, two months, but normally, normally is only one year, the term. But But mine was extended because of Corona. Because of the oldest situation we wanted to hire someone new, just during the, during the pandemic, and also because I was restructuring the green office. So, I was implementing some changes to improve it. And yeah, and it was decided that the best option was for me that well, for us this deal that is currently that we plan the thing to also execute it, instead of leaving execution to someone else that may actually not do it as as it was intended.

J: And why does it last only one year? It is just out of curiosity.

R: Well, it's normally yeah, it's normally one year, but actually it can be also extended six months more. So, what normally happened is that someone works six months as a as an officer in one of our portfolios, which are education, research, media, and campus operations, as well. So, you can walk six months as this position, and then then you can apply for the management position. So normally, the manager positions you sending the term and the middle year, of the academic year,

and then you can apply. So, this time, it was just mine was extended. But what normally happens is that so on applies and then stays for another year. But it really depends because it's connected to your student position to the student situation. So as long as you're a student, you your degree, no matter when you are over as a student, you have to give the opportunity for new people to go.

J: Thanks. Nice. That's a nice initiative. And I'm gonna start with the questions. So, the first one is, how would you define sustainability? With your own words?

R: Yeah. Well, that's a very good question. Um, so this is something that, well, we've been like thinking a lot about in our in our strategy documents and just as a team, and we basically reach to the conclusion that, for us, sustainability is the approach the fulfilled economic, social, environmental needs of the current and future generations within the means of our planet. And when we talk about the means of our planet, we refer to different frameworks, for example, the SDG framework the Sustainable Development Goals, the doughnut economy framework, which is also integrated with the planet boundaries, studies. And these are the main frameworks that we are using to walk to work and to work towards different projects and also taking into account obviously, more more at the political level, the Paris Climate Agreement, or the Green Deal of European Union.

J: Okay, I really like your definition, I think summarized, yeah, pretty well. And how would you define a green strategy? Which kind of strategy can be considered green/sustainable in your opinion?

R: Well, in my opinion, a green strategy is a strategy that aims to wash one of the working frameworks that we have in sustainability. So, if we're, if we're focused on the SDGs, then a green strategy will be oriented towards the decision-making process until the different the different level of projects and actions that can be taken towards one specific SDG, or one specific kind of boundary, or just within the **doughnut** economy understanding of economic, social environmental issues. Yeah.

J: And when you think of also green strategies, and also initiatives and policies that started from the EU, and also the UN, can you think of examples of policies and strategies that could be implemented at universities? So, you mentioned already the most common one that universities have, which is the Sustainable Development Goals. Are there any other policies that you think could fit the higher education institutions for instance?

R: Yeah, that's a very, that's a very good, very good question. So, um, well, I what I see from the European Union, I think that the main theme right now is the is the Green Deal, of course, and, and how especially how this was kind of tie to the recovery plan from the pandemic and how we won the green recovery. And we have a lot of, of companies, and also members, NGOs, and other members of the public that are really interested on this green recovery. And also, this is something that we're also taking into account. And for example, for us, this means that when the university reopens, we want that the reopen is, already has some changes that we didn't have the opportunity to implement

when the place was busy with people everywhere. So, we're talking for more talking, for example, to, to already conduct like mini experiments of things that are better to be done in small scale. And with less people, that rather than just having everyone there, and one example of this is the Ecosia challenge, which is this, this challenge this project that we have, and it's pretty much we are changing the default search engine of the areas that are the most busy of the university, as an experiment, basically, is two big rooms, computer rooms, in the main in the main building. So, we're we're trying to see if people actually likes to use the search engine in regards to the public computers, and, and depending on what the outcome of this gonna be, which I think is gonna be positive, because it's just a just a search engine, it doesn't really change that much the results. We are going to scale up our financing of planting trees operations. So so far, we have planted 245. But with the implementation of the public computers, we expect to reach over 1000 before the end of the year. Yeah.

J: That's very interesting. So, it sounds to me like you guys took the pandemic and the emptiness of the university and turn it into something positive.

R: Yeah, absolutely.

J: Yeah. And what do you think would be the most challenges that the universities have if they start implementing green strategies? So, think, for instance, universities that don't have green office, for instance, or don't have any sustainability is not really in the business plan? Yeah, which challenge they might have?

R: Well, there, there are a number of challenges in higher education institutions, more specifically, in universities, I believe that especially when you don't have a green office, when you don't have a group of people already focused on this, whether it's students or staff, you have you find yourself trying to find bureaucracy. So, bureaucracy is definitely one of the main things that you want to to kind of change as you need a cultural change in the people. Because if you want to tell them, "okay, but we can do this in this way, instead of that old way", and these will this way will be more effective, will be more sustainable, and will be and sometimes will be even cheaper or sometimes it's even more expensive, etc. But you have to take into account the whole the impact that you are creating with it. And to explain that to 50/60 years old managers, you know, that's, that's, that's the that's the difficulty, you know. So, and also one thing is important about bureaucracy is the speed of it. We believe that climate change demands origin actions, that the Parliament of European Union have declared that this is an urgency, so we should be taking it to be dealing with it as an urgency. And therefore, we should have a special bureaucratic procedure, that to everything related to sustainability to go in a fast track. And this is what I believe, you know, we need lighter bureaucracy, for things related to sustainability. Otherwise, we don't go in and cope with the rate of change that is happening, you know, and this is, I think, one of the most important messages. That is, the speed of our bureaucracy is not up to the task.

J: To me, something's very interesting that our interviews also pointed out, which is, the change of mindset is probably the hardest part. It is not even the bureaucracy and the paper and getting people enthusiastic about it, getting the financial. This is, of course, it has its challenges in itself, but change the mindset of especially teachers and lecturers that are in their 60s, and they are not really used to the idea of sustainability and spending so much money and effort on that I think that's the biggest challenge, like you mentioned. And how do you think the local government can help the universities? Do they have to help the universities in the first place and how?

R: Well, I think that definitely will be positive synergies with the local governments at the end of the day and university and a campus is generally not in the board, it is in the term of a municipality. And if you get the support of your municipality, for doing, you can do so many different things, you know, like, we have contact with the municipality of Amsterdam here. So, they, they there will, there are several things from one side, they want to listen to us and want to understand what the young population of Amsterdam, especially we're, like, you know, 30,000 people at the university. So, there are a lot of young students in this group, and people that well, they want to know, what they want for the city, how do they see sustainability, they have ideas that should be implemented in the city. And for example, things as easy as to have proper biking infrastructure around the university could really help the people to motivate them to, to buy more to the to the university, you know, and this is really falls, In many places, falls under the competencies of the of the local government, you know. So, other than these, the way trash is managed, you know, all the trash that comes from diversity is are we having, like private companies are we is the public, the public system, working efficiently effectively to separate all the waste, through waste. How we can, yeah, how we can clean this round is, for example, organizing clean-ups, with with students and making the students because a lot of people's International, to meet the neighbours that are not necessarily students around in the neighbourhood. So the community aspect of affair, this also is also very important, and, and sometimes something as easy as creating a green office at the municipality itself. In Amsterdam, we do have a green office of the municipality. And I think that's also a very important key on understanding that the changes, we can also push for them, but it's even better. They also have someone pushing from the inside to do green projects and green policies and more. And so far, we're very happy with what the what the municipality has been doing and the policies that they have put forward to combat climate change, and the economy and to improve circular economy.

J: And does the university get any kind of subsidies from the local government or...?

R: Not to my knowledge, but I don't have all the information to ask that specific thing because university to do so many different things. There's only more than one organization work in sustainability. So, we're one of them. And were represented mostly the represent mostly the

students. But we're also in touch with staff, and pretty much everyone. But still there are very different of their projects and things that might be going on. on sustainability.

J: Okay, and again, for universities that don't really have a green office, and they will have all the infrastructure that the University of Amsterdam has, what do you think would be the most important step? A few interviewees of mine said that the change should be from bottom to top. So the students should start talking about it and proposing plans and talking to the exam board and the committee of the universities, and other people believe that it should come top bottom. So the university has university has to recruit students who are interested in, do some volunteer work or even paid work at the green office, and then it goes down to the students. So do you think the most important step should come from the students? Or from the business plan or the the borders of the university?

R: Yeah. Yeah, that's, that's also very interesting. So I think **what is needed are sustainability leaders, right. And sustainability leaders can come from the bottom or can come from the top.** So we need we need we need them, you know. And, of course, if you are a student, that is motivator about sustainability, and your university doesn't have any, anything related to sustainability, at least for the students, we need leaders, we need a person that says, "Okay, let's create something new, let's, let's make this something." And when you gather some support, then you can go and talk. So, you keep the bottom the bottom process going on, but at the same time, you approach the people on the top, and to try to convince them that they also need a sustainable sustainability leader. So, one that is in charge of like pushing forward those from the top, you know, so you approach the person that is the most activated from the top with regard to climate change, and you convince this person to support you in the process. So, you get double support from bottom and from top and I think this is, this is essential to convince the people also the top because they that allows you to have financial education, to have flexibility to make changes faster, you know, so

J: I really, like when you said that we need sustainable leaders doesn't matter where they come from, we can start from the students, but also from the teachers. And do you have any tips on the small and not so costly changes that universities could implement straightaway? So, some interviewees also mentioned that the universities sometimes don't have the the, they don't do the separation of the trash. So, this could be not so costly So do you have any other ideas of...?

R: Yeah, yeah, absolutely. Um, so there, there are different things, you can do more direct interventions, more indirect interventions. One example of direct intervention could be to place, because in most of Europe tap water can be drink, and we need to, we need to promote drinking our tap water instead of buying single use plastic items, you know, like water bottles, for example. So, what we did is, we put this join the tap pipes in our, in our university, so we have several pipes, distributed in different faculties. And that that pipe is just like a pipe that you press a button, and you get fresh water, and directly from the tap. So that's one an example of like a direct integration and

that was not really super costly. And, and another example of an indirect integration, which is even cheaper is like literally zero or almost zero, is to integrate this Ecosia in the search engine of the of the university, and to promote this to be used among the students and among the staff and my everyone at the community. Because with Ecosia, you can reach a partnership, they give you a link, and through this link, if everyone joins, through this link you get a tree counter so the community together can can can like with their searchers, you plant trees.

Yeah, that's a very good one. Yeah, I always promote these to my friends and people that I know. It's such an easy way to contribute to it. You don't have to do anything. It is effortless, it's a very good tip.

R: Yeah, exactly.

J: And do you believe in the short-term solution, because it was also pointed out that sometimes when you first spend too much time to short term implementations, instead of investing one or two or two years, planning a whole business plan for the university, so they think they should focus on the short-term, long-term of both?

R: Yeah, I mean, it really depends on what kind of short-term thing are you doing? Like, for example, if you're doing a conference, that you're doing an educational event, I mean, I sometimes understand if there is one pressing topic that we should be talking about, I understand that you just do once this conference and this talk, you know, you can also make it like a jury conference or something. But even if you created one, you have it one, once, I think, if you deliver the message that you are supposed to deliver, and you deliver it with some emotional charge, so like people really remember your message after the fact after the event, I think that that's, that's positive, even if it's just a short-term thing, kind of so to speak. But obviously, more operational changes need to have a medium and long =-term horizon In order to be Yeah, more more effective over time.

J: Yeah, absolutely. And how do you think universities can get the students on board, how they can encourage the students to participate in the sustainable strategies?

R: Yeah, um, so I think one of the one of the things that you can do is, well, first, like, allowing them to have some sort of organizational structure that allows them to, to become an organization, you know, whether it's a green office, or whether it's any other type of, of organization, you need to allow them to do this, and especially, you need to provide them with at least a small amount of financing. So they are responsible of something, you know, when you give responsibility to people, if, obviously, you choose the right people to do so, they just gonna grow in the role, and they just gonna actually believe on it, you know. And and especially if we're talking about this topic as the sustainability, I believe that there is a lot of people that feel that they could be doing way more, if they had the

resources, and they had, if, you know, the university were more open towards these changes.

J: And how does it work in the office there? Can all the students who are interested participate, or they have an amount of limited amount of students who can be part of the green office?

R: Yeah, and so we are we have this structure, we are an organization, we are semi autonomous, because we can take our own decisions with regards to, well, whatever happens at the green office, what kind of projects we want to pursue, what kind of progress we want to finish. And we can also be critical with the with the policies of the university, we can be critical with their decisions, you know. And that's, that's why we're semi autonomous. We will be more limited, if we had to comply with all the corporate communication standards, with all the pretty much all these, these, these different standards apply to the departments of universities, you know. So, I think it's important that you have you semi you're semi autonomous to in order to disagree with your own university. Yeah, but not fully, because you also want the university to do give you financing. And you also want to be part of the of the university. So, you can speak to your colleagues about sustainability. And you can also speak to the students and in the name of the university, you know. So, it's important that that there is connection that there is connection in terms of I can speak with the people university with no limits, but at the same time, I can also disagree with the institution itself.

J: Yeah, sounds like a win-win situation.

And as you're probably familiar with the Green Deal, and the goal to be the first climate neutral continent, my question is, do you think it is achievable by 2050 or not and why?

R: Yeah, um, so there are there are different parts, I think there are, at least two things need to happen. From one side, we need a cultural change like a like a deeper cultural change, more extended. And I think universities are an excellent place to start it and to promote it, because of all the students that go to European universities. And not only this, also the international students return to their countries. And again, inspired by the by the green movement as they start growing offices in other countries. So right now, we have green offices in other countries, outside Europe. And that makes us very happy because we got this fire here studying with Erasmus, doing their education. They come and they get inspired. So, cultural change, for sure. But in the other hand, we also need a plan B. We also, I believe that, that honestly, we need cultural change in terms of like of like society, or like people, individual behavior, we need to they need to change, we all need to change. We need our politicians committed towards this, or we need the people taking big decisions, really, really as much as simple as possible, involved and committed. And the last thing, we need a plan B as well. So, I am from those people that believe that if we fail as a society, in terms of changing this is kind of pessimists, but it's not really, if we don't change for x reasons to to make all these individual and community changes that are required, then we need a plan B. And when we're talking about a plan

B, I'm talking about geoengineering, I'm talking about the developments in this new in this field that 10 years ago, people will be laughing at you, if you were like saying like "Oh, yeah, we cannot do this, and we're gonna put huge CO2 structures, and we're gonna control the CO, and we're gonna do all of this". But at the rate of that, the advance of technology, I think we should have a plan B, just in case. And and I think it's important that we keep providing funds to this research on doing engineering, for example. But there are also many other initiatives that that are in the same line, using technology to both to compensate for the things that we didn't do. We didn't we didn't manage to do maybe, for we're probably gonna need both in the end, you know, like, cultural change for us somehow from, from geoengineering. Yeah, but yeah, let's see, let's see what happens. Um, I'm really I'm really positive that, that we're gonna do a lot by our behavior. But I'm afraid that might not be at the speed that that is required.

J: Yeah, I agree with you. I think it's nice to set a target so high. Yeah, because it gets people moving. But it sounds, it sounds too hard for me. I also interviewed two people, one from Poland, and another one from Hungary. And they both mentioned that, when you come to when you're from Eastern Europe, you have a totally different view of the EU Green Deal, because for the universities and for the schools and for any other governmental institution, they have other issues. So, for them thinking about sustainability, it's not at all on their top priorities. First, they have to get a good education, then they have no problems, the health system, so sustainability, Green Deal, it's not a priority at all. So that's why it might be challenged to have the whole EU as a climate neutral continent. I think it's, it's, again, it's nice to set to such higher goals, because then we can try to go as close to the goal as possible, and hopefully achieve not by 2050, but maybe 2051, maybe 2055. But yeah, it's nice to have such high goals.

When I think about also the EU Green Deal, like I mentioned, I'm not from the Netherlands, I'm from Brazil, and universities that my friends study at the moment, some of them they still don't have the waste separation, which is the basic for most of the EU universities. So, when I think about universities from outside the EU, and also for the Eastern part, I know that they have other challenges that are way more important than being sustainable.

And how do you think, do you think the students would have the power to implement a green strategy in a university that doesn't have green office, the sustainability is not the core goal of their business plan?

R: Well, this is, yeah, this is really complex. It really depends on on, you know, like the culture of already the university, and and especially how open are there are they to change to changes in general. Not necessarily with sustainability, also in general, how does the institution behave when they get ideas and initiatives from from students. So, a part of the of the answer is going to be that and obviously another part gonna be as well, like, which sustainable leader you get, and if they're

really committed to, to make the change. So, it's really about also this the sustainable sustainability leaders.

J: Yeah. And then I am done interview questions, I just had one more question about, yeah, how was it for you guys in the green office, working from home? And were you guys able to implement the strategies that you had? Or maybe plan strategies for when universities are going to be open?

R: Yeah, and so it was actually a perfect moment for us, because we decided that, okay, there are a lot of things that that don't gonna be possible anymore from the campus. So offline, pretty much. Let's do other things, let's do other things that are also important for us in the community. So, the first thing that that we started to do was to restructure our our green office pretty much. Not only to make it more resilient in, you know, in the wake of the pandemic, but also to to professionalize it a little bit more to make it to have more continuous improvement, to know, to have more transparency, and to be able to fully understand what is what should be our scope for the next five years. So, we create this 2025 vision, and that really help us to do work more focused on on some specific things, because when when we started, we were pretty much the only ones doing sustainability at the full. But nowadays, there are many other small organizations, research groups, and other people doing sustainability. And we we realized that we needed to focus more on specific things to increase our impact, and at the same time to live a certain margin to the other actors to contribute and to, to work together, you know, so. So yeah, we kind of stopped trying to do everything, but we are now focused on more more the most impactful lines of actuation for for us. Yeah. So this is Yeah, this is what's happened, we restructure, we move everything online. And this was the main the main changes, I would say. We had to recruit a new team online as well, like everything online. I think we learned a lot from from this experience, and it helped us to, to do that extra milestone of the the utilization. So now we use more tools and make our work even more efficient and easier, you know? One example is this meeting, you know, through the Calendly you know, this this application that just go and book with me.

J: Yes, amazing. Very handy

R: These kinds of things, you know, and things like this way, we started to brainstorm about how we can make this more effective for us and more easy for us as well, because we're also students. We need to really need to, you know, to balance out the time that we have with our studies and everything that we do. Yeah.

J: And you guys also help hosting online events for the students? Or were you working more on that structural changes that you just mentioned?

R: Yeah, so we implemented these changes, this was the main focus, restructuring. And, and then for online events, we did have three, three different online. The best was one offline. The one offline was like with the COVID, rules and all of that. So, it was like a clean-up event. So, we were people in two different people from different faculties, so they could speak each other about the new things. And they collected trash from their own campus where they're living. So, we're kind of like cleaning their own campus. So that that was also one example of the things that that we did, the Ecosia challenge is another example. We're reviewing procurement processes at the university. We are revamping our journal. We have this peer-to-peer review journal from research that is made by thesis, thesis researchers, yes papers for students on sustainability, and we publish them as a first place to publish any paper and peer review and we got the DOI number. So, we have, not the DOI number, sorry, the publication number official publication number in the Netherlands. And yeah, there's also something that we got recently and yeah. We work also with the university rankings for example. That's also one part of how we help them yeah, so far.

J: Yeah, there's always lots to do.

R: Yeah, yeah, there's always a lot. Yeah, absolutely.

J: Now Rodrigo, thank you so much for your time

J. Interview Questions

Intro questions

- Why did you decide to go into this field?
- Was there any particular event in your life when you have decided that you want to fight for the environment and switch to green?
- Are there any sustainable-related projects you have worked/are currently working on?

Research question

- 1- What does sustainability mean to you?
- 2- What are green strategies?
- 3- Which EU/UN sustainable policies/initiatives are aimed at green strategies for high education institutions? Are they truly helping to implement green strategies?
- 4- What are the challenges of implementing green strategies in higher education institutions?
- 5- How can the local government assist higher education institutions to implement green strategies?
- 6- For you personally, what could be the most important step for higher education institutions when implementing a green strategy?
- 7- For you personally, what could be the most difficult step for higher education institutions when implementing a green strategy?
- 8- Do you have any suggestions about small/not so costly changes higher education institutions could implement in a short-term to be more sustainable?
- 9- How could higher education institutions involve their students when implementing green strategies?
- 10- The goal of the new European Green Deal is that by 2050 Europe becomes the world's first climate-neutral continent. Do you personally think such a goal is achievable? Why / Why not?
- 11 - As a student, do you think one would have the means to introduce the idea of green strategy in the university she/she studies at? Why / Why not?

K. Table Most Sustainable University Ranking

* = partially, not 100%

University	Country	C1.1	C1.2	C2.1	C2.2	C2.3	C2.4	C2.5	C3.1	C3.2	C4.1	C5.1	C5.2	C6.1	C6.2	C7.1	C7.2
University of Sydney	Australia	1	1	1	1	1	1	1*	2	1*	1	1	1	2	1	1	1
University of Tasmania	Australia	1	2	1	1	1	1	1*	1*	1	1	1	1	1	1	1	1
University of São Paulo	Brazil	1	2	1	1	1	1	1	2	1	1	2	1	1	1	1	1
University of British Columbia	Canada	1	2	1	1	1	3	1	1*	3	1	1	1	1	1	3	1
University of Victoria	Canada	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tongji University	China	1	2	1	1	1	3	2	3	1*	1	1	1	1	1	3	3
University of Helsinki	Finland	1	2	1	1	1	3	2	2	1*	1	1	1	1	1	3	1
Aix-Marseille University	France	1	2	1	1	1	1	1	2	1	1	1	1	1	1	2	2
Umwelt-Campus Birkenfeld	Germany	1	1	1	1	1	3	1	2	1*	1	1	1	1	1	1	1
University College Cork	Ireland	1	1*	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Università di Bologna	Italy	1	2	1	1	1	2	2	3	2	1	3	1	3	1	3	3
University of Groningen	Netherlands	1	2	1	1	2*	1	1	1*	1	1	1*	1	1	1	1	1
Vrije Universiteit Amsterdam	Netherlands	1	2	1	1	1	1	1*	1	1	1	1	1	1	1	2*	1
Wageningen University & Research	Netherlands	1	1	1	1	1	3	1	3	1	1	1	1	1	1	3	3
University of Auckland	New Zealand	1	3	1	1	1	1	1	3	2	1	1	1	1	1	3	1
Peter the Great St Petersburg Polytechnic University	Russia	1	2	1	1	2	1	1	2	2	1	1	2	1	1	2	2
University of Nottingham	United Kingdom	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1
University of Oxford	United Kingdom	1	2	1	1	1	1	1	2	1*	1	1	1	1	1	1	1
University of California	United States	1	2	1	1	1	3	1	3	1	1	1	1	1	1	3	1
Portland State University	United States	1	2	1	1	1	1	2	2	2	1	1	1	1	1	1	1

L. Criteria table

1. Policies/initiatives/Certificates	
1.1 The institution integrates one or multiple SDGs set by the UN.	
1.2 The institution has the ISO14001 certificate ((Environmental Management)	
2. Waste management	
2.1The institution separates general waste from recyclables (paper, plastics, metals, glass) from general waste	
2.2 The institution has all of the following trash bins in its premises: paper, plastics, metals, glass and organics.	
2.3 The institution post 'Recycling Tips' posters near the waste separation facilities	
2.4 The institution recycles the used printer cartridges through the supplier or place them at the Yard of Environmental Sustainability	
2.5 The institution uses reusable containers and cutlery to serve drinks and food in meetings and gatherings.	
3. Eco - printing	
3.1 The institution uses 100% recycled A3 and A4 white paper for in-house printing and photocopying	
3.2 The institution issues newsletters, brochures, handbooks, and promotional materials in e-version and minimize the number of hard copies printed and distributed.	
4. Raising Awareness	
4.1 The institution organizes awareness-raising events and/or projects	
5. Energy consumption	
5.1 Conduct energy audit	
5.2 The institution sets an energy-targeting and cutting greenhouse gases goals.	

6. Sustainable food	
6.1 The institution offers fair trade/organic food in its premises.	
6.2 The institution offers food options for those who follow a vegetarian/vegan diet in the canteen	
7. Water Conservation	
7.1 Efficient toilets	
7.2 Rainwater harvesting	

M. Information about each step of the Sustainable Action Plan

8.2.1 ESD FOR STAFF MEMBERS & STUDENTS

- Train staff members – UTAS, UV & UVci
- Implement student-led initiatives – UTAS

As pointed out by some of the interviewees, sustainability is still not seen as a priority. Therefore, HEIs must educate everyone on campus on this subject to bring them on-board.

8.2.2 COMMUTING

- Cycling Plan UVci & UTAS

Facilitate the means of students/staff members to commute by bike since it has environmental and economic benefits. As pointed out by Eleri and Rodrigo, HEIs must seek partnerships with the local government to implement such actions.

- Carpooling All four HEIs

Both UVci & UCC offers a carpooling scheme organized for staff members. It is important to stress that sometimes people do want to be more sustainable and contribute to sustainable actions, however, they are too indolent to do something on their own. Therefore, such initiative should be included.

8.2.3 FOOD

- Meatless Mondays – VU & UCC

The initiative adopted by both VU & UCC to encourage plant-based diet and raise awareness regarding the meat industry.

- Offer vegetarian/vegan options - All four HEIs

Similar to Meatless Mondays, by offering plant-based options students/staff members have the option to try a more environmental-friendly meal and comprehend its benefits.

8.2.4 ENERGY

- Change to the LED lighting system - All four HEIs

A few interviewees mentioned such initiatives as a not so costly/easy to implement action HEIs could implement immediately.

- Reduce the heating by one degree Celsius in winter – UTAS

Corey explained that UTAS set realistic/achievable goals. Reduce the heating by one degree

Celsius in winter has a tremendous impact on the overall energy saving.

8.2.5 WASTE

- Provide 5-bins waste separation (glass, paper, plastic/aluminum cans, organic waste) - All four HEIs

As Pau stressed during the interview, this is the bare minimum HEIs and/or any other type of institution should have. Everyone who has the means to recycle must do so.

- Ban single-use plastic from the canteens/cafés/coffee machines – UCC

Adopting a plastic-free campus policy creates a significant waste reeducation.

8.2.6 PROJECTS IDEAS

- Implement student-led initiatives

Irene pointed out that allowing students to come up with their own projects, not only increases the likelihood of the event to succeed since students know better what they want/need, but it also gives them a sense of responsibility and accountability. Finally, it also shows that their voices are heard and their ideas matter, (Irene)

- Install Ecosia as the search engine in the computers around campus – VU

By far the easiest sustainable action any HEIs can implement immediately, and both students/staff members can contribute to the tree plantation effortlessly.

- Green Week – UCC

Although this is a national initiative in Ireland, HEIs could plan their own green week as they see fit. Conducting a survey beforehand would also be useful, in order to understand what students are interested in, consequently increasing the attendance rate.

- Swap Shop – UCC & UTAS

It can help everyone on-campus to get rid of unwanted items as well as encouraging environmental-friendly purchases.