



PR1 Greenfluence Practice Collection with the Executive Summary

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2021-1-HU01-KA220-HED-000027563

GreenCool - Let me influence your green self! - Skill development in the encouragement of mindset towards environmental awareness and sustainable development in the alliance of ECoC

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1. Introduction

1.1 General Information

Programme:	Erasmus+
Key Action:	Cooperation Partnership in the field of Higher Education (KA220)
Project title:	GreenCool - Let me influence your green self! - Skill development in the encouragement of mindset towards environmental awareness and sustainable development in the alliance of ECoC
Acronym:	GreenCool
Project period:	28/02/2022 – 28/10/2024

1.2 Objectives of the project

The general goal of the project is to develop environmental awareness among university students and to spread the thought of sustainable development among the widest possible age groups at events that attract large audience. There is an aim hierarchy, which means partners regard the GreenCool project as the next jigsaw in their strategic framework to reach continuity in the field of university students' skill development. Therefore we committed to develop an innovative online course material and to mainstream sustainable development in all curricula for higher education students. Recognizing the convincing power of young influencers, the project aims to reach out to all age groups of audience at cultural events and festivals in the various European Capitals of Culture to encourage environmentally conscious activity and to be active members and beneficiaries of sustainable development. Furthermore our goal is to equip students with communication tools and sustainable attitude to become effective advocates for advancing EU green economy and culture.

In the following the Project Result 1 result is elaborated in the PR1 Executive Summary.

Before that the description of the aim and tasks of PR1 is exhibited.





2. Aim, objectives and tasks of PR1

2.1. Description of PR1

Output Title	Greenfluence Practice Collection and research
Output Type	Primary (questionnaire, focus group interviews) and secondary (desk top, best practices) research
Start Date	28.02.2022
End Date	31.08.2022
Working languages	English, Hungarian, Estonian, Latvian (Lettish), Romanian
Output Short Description	Best practice collection, the Greenfluence Practices Collection, based on primary and secondary data analyses which gives the base to the development of the MOOC material.

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DESCRIPTION & NEEDS

The goals of the project can only be achieved if we are aware of the communication techniques we can use to influence the target group on the topic to be developed.

In the first stage PR1 we will conduct a comprehensive research, according to the following process:

1. Desktop research, including literature review and best practices, case studies collection
2. Questionnaire survey with students and influencers partly based on previous studies and desk top research, and developed by researchers on this field
3. Focus-group interviews with influencers to explore influencer tools and techniques. We will conduct a survey among students (secondary and tertiary education), young adults (age between 18-25) and influencers in the partner ECoC cities (on the required competencies) in cooperation with each partner in each country (PR1).

Survey among students will focus on: What influencing techniques are secondary and tertiary students are tuned in and responsive? What topic calls their attention? How responsive are they to green topics? The focusgroup interviews are carried out with present influencers to see where and how they influence? What are the channels and different communication techniques? What topics are they interested and use? Do they deal with any kind of green, sustainability themes? We have defined three target groups: present influencers, present Greenfluencers and our students as potential green influencers/ambassadors (as the main impact of influencers is that students become real ambassadors of sustainable development). These data will be analysed both with a quantitative and qualitative methodology. The outcomes will be built in second stage. The materials needed for the research are developed by the partners. The outcome of the desktop research is a summary in English which gives partly the base of the questionnaire survey statements and the focus group interview questions. The questionnaires and focus group materials are developed in English. Partners will translate them into their own languages and conduct the survey and focus group interviews in their own countries. The final Project Result1 is a best practice collection titled Greenfluence Practices Collection.





TARGET GROUPS

Influencers, university and potential university students, young adults

INNOVATION

The output aims to develop an innovative demand and supply approach to see on the one hand how influencers interact and keep followers, and on the other hand see the interest in topics, influencer types of the followers, or potential followers. For this mixed method of data collection is used. The main innovation is to research into the fact how online influencing techniques can be converted into offline communication trainable techniques.

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IMPACT and TRANSFERABILITY

The immediate impact of the output is finding the most efficient online (and hopefully some offline) influencing techniques. Furthermore to see the demand and interest of the next generation, especially if they are open to respond to green topics. The long term impact of PR1 is to have youth involve throughout the project to test pilot material and the MOOC course with them in PR3 and PR4 and ask feedback for further development. We think there is a niche in influencer techniques survey investigating which and how it can be turned to offline mode to have the same impact. The transferability potential of the output is that it can serve as a model for initializing such processes in an intentional level.

METHODOLOGY

We apply quantitative data analyses, statistical and comparative analyses. Thirdly, focus-group interviews are carried out by partners with influencers to explore influencer tools and techniques. The result will be analyses with qualitative data analyses (e.g. ATLAS program). The final Project Result1 is a best practice collection titled Greenfluence Practices Collection.





2.1. TASKS OF PR1

	Project result 1	Leading Organisation	Start date	End date
PR1	Greenfluence Practice Collection and research	UP	28.02.2022	31.08.2022

Task PR1	Description of the task	Division of task	Leader of the task
T1	collecting and summarizing case studies, best practices, literature review and articles	All partners	UP
T2	survey among university and secondary school students (demand and supply questionnaire)	All university partner	UP
T3	focus group interviews with influencer (6 influencer/partner age bw 18-25)	All university partners	UP
T4	desk research data analyses	MILITOS	MILITOS
T5	data analyses of focus group interviews	VMU	VMU
T6	data analysed oft he questionnaire	WUT	WUT

The TQM part throughout all PR is divided between MILITOS who does the internal task and PR and UP who is checking the professional content sustainability of the project process itself.

Result languages of the analyses: English , Estonian , Greek , Romanian , Lithuanian , Hungarian.

PR1 Report is in English , Estonian , Greek , Romanian , Lithuanian , Hungarian.





3. Executive Summary of PR1

3.1. Introduction

The secondary and primary analyses aim was to gather information about youth knowledge and attitude on two main issues: social media (following and using) especial focusing on influencers and green-related topics. The data collection and analyses period was between 28 February and 31 August 2022. The secondary research was a desk top analysis looking at articles, best practices, past and ongoing projects nationally and internationally to examine the similarities and differences among the 4 countries: Estonia, Hungary, Lithuania and Romania. The primary research included questionnaire and focus group interviews. The data were analysed with qualitative and quantitative data methods in order to have thorough and deep results and to identify the online training material green and communication themes. The results and the recommended themes is now summarised in the **Greenfluence Practice Collection and research**.

The aim of the desktop research as secondary data analyse was two-folded: firstly to examine the best practices, previous results and literate on and about youth attitude towards 'green', 'influencer' and 'communication' issues. Secondly, to provide a solid bases in order to develop a questionnaire and focus group questions to exploring the targeted 4 countries' youth attitudes in the previously mentioned topics. In the following the outcomes of the focus group interviews and questionnaire are summaries in reflection and connection to the secondary data analyse. The detailed reports of all research (desktop research, focus group and questionnaire) are at the end of the Report in the appendix as follows: *Appendix 1. Desktop research; Appendix 2. Focus group analyses; Appendix 3. Questionnaire result*. The outcomes are based on 4 countries' focus group interviews with 27 participants and 701 respondents of the questionnaire with youth age between 18-25. Before the detailed results it must be mentioned that there are slight differences among Hungarian, Romanian, Lithuanian and Estonian results. As the research outcomes give the base of PR2, 'Developing MOOC material for ECoC Greenfluencer course' the similarities are more emphasized in the report to have a more internationally applicable learning material.





3.2 Outcomes on communication platform and attitude

The majority of the respondents use the following social media platforms for communication to get information, post their thoughts and feeling and to follow opinion leaders, friends and influences on various topics. Instagram is the most preferred platform, followed by *Facebook, You Tube and TikTok* though the last two varies between countries. Interestingly WhatsApp, Telegram and Twitter are country specific. As for communication techniques *Instagram considered creative, TikTok considered funny but very powerful if it comes to specific videos (such as green topics), You Tube is perfect for storytelling that is relevant and give audience instantly what they want.* Subgroups on FB are for information and event sharing that would take place offline in an action. Snapchat is used by younger kids and mainly in Lithuania, while LinkedIn and Pinterest are rarely used.

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3.3 Outcomes considering influencers

Most influencers are followed in *Instagram, TikTok and You Tube* in all 4 countries. The highest values of influencers are in Hungary and the lowest is in Estonia. Interesting topics, quality pictures and entertaining content are the most important factors why youth choose to follow an influencer. The most influential influencers are those who inspire people's confidence and share unique experiences. Interestingly the majority of the interviewed influencers do not consider themselves influencers but rather opinion-sharers or opinion leaders. In general *influencer is someone (on or offline) who shares opinion or does and act that has impact on others who either share further or act upon those issues.* Influencers have the skills to mobilise others and set examples for an important issue in the society. They should *share daily, realistic image, short visualized stories.* The *credibility* of an influencer is gained by *exemplary behaviour and charity deed* that is in connection with social issue. Youth follow both *local and international influencers* (language is not a barrier as 96.5% of the respondents speaks good English) and they follow local but also well-known influencers. The influencers themselves want to *improve their content and storytelling script video writing skills.*





According to the questionnaire however *influencers and politicians are less trusted* in general among these youth. *Parents and experts by 90% are the most trusted* followed by teachers and friends. Regarding *green and environmental issues experts and teachers are the most trusted*, followed by friend and NGO's, and the least trusted are the public institutions. Youth *stop following influencers* mostly when the *get bored; not producing quality content; no longer represent the issue they started with or post too many advertisements. Two thirds of the respondents in the questionnaire follow influencers who post environmental issues* and half of them share news related to environmental topics. This means that youth are interested both in theory and in action considering green issues.

3.4 Outcomes on green issues

The exploratory research did not want to limit the definitions of 'green' to just environmental topics, in order not to limit but broader the online teaching material varieties. Therefore the young people identified different kinds of green issues and approaches. Issues such as: *nutrition, responsible consumption, urban lifestyles, urban mobility, sustainability of public spaces, small household habits, energy saving, air quality, carbon footprint, critical recycling techniques, circular economy, zero waste/waste management, climate-phobia and anxiety, greenwashing, ethical thinking, green mobility and collective social responsibility*. About green education and communication youth want to feel these relevant, important, trendy and sexy. "*Small steps, big results*" and "*be proactive*" and "*take social responsibility*" what green influencers emphasised. The *negative side of 'green'* was also considered: company using green as marketing and also pay influencers to do that, misinterpretation of labels (bio, but what it is really?). The concept of *green guilt* appeared, meaning that young people are afraid to be green as the majority might mock them. Also there are lots of misinformation on green topics, so 'grey zone', a kind of skill to filter green information is needed. Influencers should be simple and authentic on green issues to convey the right information and attract people to pay attention and act.

3.5 Communication and green topics to the ECoC Greenfluencer course (PR2)

Based on the previous research outcomes the following 12 communication techniques and 12 green issues are suggested to be included in the ECoC Greenfluencer course:





3.6 Communication techniques and structure of discourse :

- 3.6.1 Storytelling on and offline
- 3.6.2 Blogging/glossary writing
- 3.6.3 Short film, video (You Tube, TikTok)
- 3.6.4 Instagram, TikTok techniques offline-acting
- 3.6.5 How to create powerful picture content
- 3.6.6 Elevator pitch
- 3.6.7 Pecha Kucha
- 3.6.8 Oxford debate
- 3.6.9 TED talk
- 3.6.10 Gamification
- 3.6.11 Communication with art and music
- 3.6.12 Round-table discussion

3.7 Green topics:

- 3.7.1 nutrition and food-waste
- 3.7.2 sustainable fashion
- 3.7.3 urban lifestyles, sustainable public living
- 3.7.4 responsible consumption: small household habits, individual's responsibility
- 3.7.5 energy saving and alternative energy: air and water quality and quantity
- 3.7.6 collective social responsibility: individuals, companies and institutions
- 3.7.7 critical recycling techniques, waste management and circular economy,
- 3.7.8 climate-phobia and anxiety,
- 3.7.9 greenwashing and ethical thinking
- 3.7.10 green mobility

These topics will be the main focus of the course material allowing naturally other subtopics within to occur in the syllabus.





Appendix

Appendix 1. Desktop research

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Greencool

Let me influence your green self! – Skill development in the encouragement of mindset towards environmental awareness and sustainable development in the alliance of EcoC

Greenfluence Practices Collection and Research

Desktop research, literature review and best practices – Analysis of findings (Proj. Ref. R1-T4)

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Introduction

The present document summarizes the main findings of the desktop research carried out by the GreenCool partnership in Hungary, Estonia, Lithuania and Romania. The research was undertaken by the University of Pannonia (Hungary), University of Tartu (Estonia) Vytautas Magnus University (Lithuania), West University of Timisoara (Romania) and Militos Consulting S.A. (Greece).

The methodology of the research resulted from the initial collaboration among partners during the project's kick-off meeting hosted by the University of Pannonia in Veszprem, Hungary at the beginnings of March 2022. The objective of the research was to identify and collect secondary data, **reflecting aspects of the involvement of young people in fighting climate crisis**, as well as the ways this involvement could be **further empowered by the means of 'influence' and 'influencers' as facilitators**. Thus, the communication profile and preferences of young people (age group 18-25), especially as studied with respect to social media, were also explored.

The secondary data research looks into providing data which will be cross-fertilised with primary research data by the means of both quantitative research (online questionnaire to collect feedback from more than 400 students in secondary and tertiary education, young adults and influencers in Hungary, Estonia, Lithuania and Romania), as well as qualitative research (focus groups with social media influencers). The ultimate goal will then be to come up with a **well-documented profile of young people**, and especially students in tertiary education, **reflecting their 'green' and 'communication' profiles as agents or prospect agents in fighting climate change**. In addition, the concepts of 'influencing' and 'influencer' are equally explored in their role as facilitators and triggers for action and involvement from both sides of the communication continuum, that is, the influencer and the follower. This in turn will lead the partnership to those methodological tools and pathways which are appropriate and effective in developing the GreenCool MOOC material and the corresponding ECoC Greenfluencer course with the provisional title: 'Attitudes shaping communication techniques and green related topics in the 21st Century'.

Taking a cue from generic queries the GreenCool partnership would like to explore as set out in the proposal application (e.g. What influencing techniques are secondary and tertiary students are tuned in and responsive? What topic calls their attention? How responsive are they to green topics?) we developed eight (8) secondary research topics, which address 'green' and 'communication' areas and how young people are related to them according to sources such as publications, papers, studies and statistical data that reflect attitudes, involvement and agency on behalf of the young at the nexus of climate crisis-communication-influence-action. The 8 research topics are the following:

'Green' area research topics

1. Identification of the extend by which young people 18-25 and especially students at HEIs constitute a 'critical' social group in acting against climate change and crisis?
2. What are the green/climate crisis topics that seem to be most relevant for young people/students?
3. What are the good practices/interventions awareness raising or action oriented that yielded critical involvement and initiative of young people/students in fighting climate crisis?





4. Exploration of the hypothesis if young people (Gen Z mostly) perceive climate crisis and its urgency in that case as a negative legacy handed over, passed to them by the preceding generations or not.

Communication area research topics

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5. What is the communication profile of young people? Identification of preferred communication channels and attitudes regarding channels, format, image vs text, speed, length etc.
6. Identification of discrepancy or “incompatibility” between the terminology (jargon or non-jargon) used in mainstream communication and youth communication about climate change/crisis topics.
7. How are young people perceiving influence and influencer as trends that can shape people, attitudes, and outcomes?
8. Exploration of the competence of young people to critically assess information as offered in the web, especially regarding climate and green topics.

In the following sections we will provide the **main findings for each of the 8 research topics**. We primarily attend data and insights, that are valid at a generic, rather horizontal level, but besides that, country-specific data have been also explored towards providing us with more localized idiosyncrasies and attitudes of young people in the four countries where possible.

The presentation of data for each research topic are complemented by insights and comments, which are deemed as useful in carving out a set of characteristics and attitudes of young people, that would help the partnership to outline young people ‘learner’ personas as recipients of the Greenfluence course, but also agents of influence towards the academic and wider community at local or national level. For each set of the 8 research topics (Green topics 1-4 and Communication topics 4-8) we sum up the key take-aways as surfacing from the findings. Lastly, the Executive Summaries for each research activity in Hungary, Estonia, Lithuania, and Romania, as well as the sources the GreenCool partnership consulted when conducting the research are annexed to this document.

Green area research topics

1. **Young people as a ‘critical’ social group in acting against climate change and crisis**

According to various studies and research, young people seem to play a **crucial role as key drivers in acting against climate change**. The United Nations Development Programme (UNDP) survey in 2020 demonstrated that 6 out of 10 persons of all ages across 50 countries, consider **climate change as an emergency**. The percentage is even higher for young people under the age of 18, while in comparison, it seems that the **educational level of a young person has a strong positive correlation to that**. Youth is referred to as the “torchbearers” of the 2030 Agenda for Sustainable Development of the UN. Young people between the ages of 16-25 are not only aware of climate change and its impact, but they state that they are very or **extremely worried** about it, which in





turn has certain emotional and psychological impact on them such as feeling **afraid, sad, anxious, but also angry, powerless, and helpless.**

Awareness, education, and information seem to be the main facilitators according to young people towards becoming informed agents in fighting climate crisis. At a different level, **engagement in collective action** such as participation in civic organisations towards social pressure and exercise of power at the political level are considered by young people effective tools for climate change mitigation. **Sustainable consumption models and life-style** choices are lastly individual practices, showing the interest of young people to **act as individuals rather than collective actors** against climate change.

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With respect to these aspects, at a global level, the inclusion of climate change as a subject in school curricula at different levels of education seems to facilitate and condition young persons' attitudes towards climate change. We could thus conclude that there is a **strong trend of emergence of young people as agents of change in the global climate crisis discussions and arena**, which eventually makes the **engagement of young people** in climate change governance and policymaking an **urgency**. 'Agents of change' could then be the meeting point of young persons' attitudes and practices in climate change discourse at four levels: 'activist', spurring 'climate action', 'necessary voices' and 'crucial stakeholders'.

Having a look at **national levels** (i.e. in Hungary, Estonia, Lithuania, and Romania), drawing from the collected data we highlight the following aspects:

Hungary

Molnár (2020) points out that young Hungarians aged 15-29 are characterized by a **closed mindset** in terms of attitudes and values, i.e. moderate tolerance, low levels of trust at both personal and institutional level, a **lack of involvement in public affairs** and a high level of disinterest. **The majority** of 15-24-year-old people (92%) **believes that people would do something about climate protection** even if they had no interest in it. This is reflected in the fact that for example **Greta Thunberg's persona** in Hungary **encouraged adults rather than young people** to take part in the demonstrations on Kossuth Square in Budapest in 2019. Young people in Hungary (to a greater extent than adults – 80% to 69% respectively) **consider modern science, rather than the government, as responsible to solve** the environmental crisis, while at the same time, they seem to **place more importance to personal responsibility** (35%) **than adults** do (28%).

Estonia

Young Estonians seem to **take distance from collective action** in fighting against climate change. They usually don't participate in demonstrations, strikes or boycotts, but rather, they prefer sharing opinion through **less traditionally activistic means**, such as social media, blogs, art and music, signing petitions and making donations. According to a recent study (Pan-European Survey – Main multi-country Survey: Ipsos by the #ClimateOfChange, led by WeWorld, 3.2.2021) Estonian youth demonstrate one of the **lowest percentage (5-7%) in readiness to engage in activism** (demonstrations,





protests etc.) Compared to young people in Europe, Estonian youth belongs to the **less-worried group**. When in Europe the average of being worried about climate change is 76%, in Estonia the number is 58% for the general public and 67% among youth.

Lithuania

The Lithuanian case resembles this of Estonia. Young people show **equally low interest in participating actively in collective activist initiatives** (8% as compared 14% at EU level). In 2019 for example, it has been reported that Lithuanians and young Lithuanians in particular "...are lagging behind very very much. Up to 100 people took part in the last event [Fridays for Future] in the Cathedral Square in Vilnius. And there were thousands in the Austrian capital Vienna. But we are slowly moving towards that" (Young people in Lithuania join climate change protests but lag behind Western Europe, Vaidotas Beniušis, BNS, 24.5.2019). However, **almost half of young people in Lithuania believe that these types of actions have an impact on fighting against climate** (as compared to 48% at EU level). (Source: Pan-European Survey – Main multi-country Survey: Ipsos by the #ClimateOfChange, led by WeWorld, 3.2.2021).

Romania

In the Romanian case, there is **a lack of interest of people over 18 to actively participate in collective actions against climate crisis. Movements** like Fridays for Future or the Extinction Rebellion **are barely known** even by name (3% and 6% respectively have stated that they have heard about the movements according to 'Greta Effect in Romania? IRES National Opinion poll on Climate change' (September 2019).

However, **Extinction Rebellion Romania**, in Cluj, and București has **managed to animate activism for the environment** in the forms of street walks and public debate. Moreover, at the peak of the Fridays for Future movement in Romania in early 2019 "...more than 2,000 people, mainly school and University students, took to the streets of Bucharest demanding immediate measures against the unfolding climate crisis. In other parts of the country small protests were also held. The pandemic and the lockdowns did put a brake to this movement in 2020." (<https://thesocialist.org.au/manifesto-of-fridays-for-future-in-romania-an-inspiration-to-climate-movement/>).

Relevant issues however, which lie behind those movements and initiatives, **like global warming** for example, are **considered by almost all, as a very serious problem**, while 75% of persons over 18 state that there are visible signs of global warming (e.g. rainfalls, weather, deforestation; almost all of them as a result of high levels of pollution in the case of Romania. (Source: Pan-European Survey – Main multi-country Survey: Ipsos by the #ClimateOfChange, led by WeWorld, 3.2.2021).

Attitudes towards participation in collective actions against climate change in Romania are **close to the EU average**. Young people declare at 11% that they participate in demonstrations, protests, and similar initiatives. Lastly, almost half of the Romanian youth (45% as compared to 48% at EU level) believe **that such actions can have a considerable impact** in the climate change discussion and mitigation.





2. The green/climate crisis topics that seem to be most relevant for young people/students

Persons at the age of 20+ seem to have **more direct experiences of climate-induced disasters in general and strong sense of social responsibility**, sometimes in terms of gloomy contexts such as planetary challenges of climate change or species extinction, which imply a **direct existential threat**. Climate change has also brought about an **emerging psychological phenomenon termed 'climate anxiety' or 'eco-anxiety,'** which has been described as a “chronic fear of environmental doom.” (UNDP Small Grants Programme (2021), Sanson et al (2019), Fekete (2020), Kristóf and Tóthné Szita (2020), Székely (2020), Molnár (2020), Balázs and Ágoston-Kostyál (2022)).

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On the other hand, **climate change is mainly discussed as a scientific issue**. However, results show arena-specific differences in online communication. There is a **greater diversity of topics in the mass-media-induced discussion** arena. This is further underpinned by the significant amount of communication without direct reference to climate change. Thus, discussions seem to be sometimes led “off-topic”: **users associate diverse topics with climate change that are not directly related to it from the “expert’s” point of view**, e.g. nuclear disasters or the ozon hole. It can be argued that laypeople **communicate “creatively” about climate change** and refer to topics that might go beyond the journalistic and expert framing. Topics of user comments often differ substantially from the topic of the initial journalistic article. (Lörcher, I., & Taddicken, M. (2017). Discussing climate change online. Topics and perceptions in online climate change communication in different online public arenas. *Journal of Science Communication*, 16: A03.)

Having a look at **national levels** (i.e. in Hungary, Estonia, Lithuania, and Romania), drawing from the collected data we highlight the following aspects:

Hungary

According to Hungarian research from 2016, **young Hungarians see global warming and mass migration as the two biggest threats** facing the world over the next 20 years. A higher proportion of Hungarian people with tertiary education think that there is **a link between climate change and migration**.

Young Hungarians between 15-24 years **are less likely to believe that human activity has a significant role to play** in climate change. In terms of climate change adaptation methods, a higher proportion of young people indicated the **preservation of green spaces and personal changes**. Only 8% of respondents aged 15-24 believe that people are doing something about climate protection, even when they do not have personal interest in it. Two third of them **believe that people do something about climate change only if it is financially worthwhile**. (Botár, A., Cselószki, T., Éger, Á., Farkas, I., Fekete, Zs., Lajtmann, Cs., Magyar Természettudományi Akadémia (2016): A magyar lakosság klímaváltozási attitűdvizsgálata (Climate change attitudes of the Hungarian population)).





Balázs and Ágoston-Kostyál (2022) state that the twentysomethings are the most controversial group compared to other age groups. They are the ones who use public transport the most, and have a **moderate consumption of meat, milk and eggs**. They carry a bag when shopping and buy half of their **clothes second-hand**. In their case it is worth focusing on **selective waste collection**, the use of **food waste** and reducing **water consumption**. This age group is open-minded and their behaviour could be shaped by evidence-based arguments. (These results are most typical for graduates, working, singles in Budapest and large cities.). Moreover, reflecting certain aspects of climate change topics, a larger number of young people are planning **energy saving** investments in their households, and they would rather use their own financial resources compared to other age groups. Young people are also willing to pay more for **environmentally friendly products**.

Estonia

[According to young people](#), the Estonian state should contribute more to maintaining a **clean natural environment, promoting human health and ensuring security and safety**. In East-Estonia most relevant topic is how to **change an economic model** in the area that has been for decades relying on **fossil fuel industry**. Young people participated in [Kliimakogu](#) (Climate Assembly) to make suggestions on how to change their living **environment greener**.

Lithuania

The analysis shows that among young people, most green influencers focus on a certain topic related to **sustainability**. The topics of the content are often a **combination of green topics and more ordinary matters**. Moreover, a very frequent topic among green influencers is activism, as they either take their followers along when they are active or show them activism at home, also through social media.

Romania

The most important environmental issues for Romanians according to the Special Eurobarometer 501 Citizens Attitudes towards environment (2020) are **air pollution** (45%), **water (rivers, lakes) pollution** (41), **agricultural pollution** (pesticide) and soil degradation (37%), **increased quantity of waste** (36%), climate change (35%), decline of species and of biodiversity and natural ecosystems (forests) (36%), drought and floods (24%), deficit of drinking water (24%), phonic pollution (11%). In general, Romania ranks above EU average in terms of preoccupation regarding the following environmental issues: **rivers pollution, agricultural pollution, phonic pollution**. Thus, **“pollution”** seems to be the prevailing concept in the climate crisis discussion.





3. **Good practices/interventions (awareness raising or action oriented) that yielded critical involvement and initiative of young people/students in fighting climate crisis?**

There have been several interventions and activities at national and global level, that have had a considerable impact on the climate crisis discussion, and which were characterised by the involvement of young people.

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Important top-down climate change mitigation initiatives supporting young people:

- **Small Grants Programme (SGP) of UNDP** is systematically working to **empower young people through its grant-making process**, actively encouraging the participation of young individuals and youth-led organizations to enable this group to make change in their own communities.
- To address skills and capacity gaps identified by youth stakeholders, SGP has launched a dedicated **Innovation Programme on Youth and Climate Change**. The programme enables young people to **qualify for green jobs, start green enterprises** and lead climate actions locally and nationally.
- Launched by Prince William and The Royal Foundation in October 2020, **The Earthshot Prize** is the most prestigious global environment prize in history, designed **to incentivise change** and help repair our planet over the next ten years. The Prize aims to turn the current pessimism surrounding environmental issues into optimism.

Activism (bottom-up)

- **Large demonstrations and school strikes** for climate protection all over the globe, called the **Fridays For Future (FFF) movement**. The leader and the face of the movement is **Greta Thunberg**, schoolgirl, climate change warrior, who told The Guardian: 'Some people can let things go. I can't' (2019).
- **Ground-breaking legal cases (e.g., Portugal 2017** - European Court of Human Rights to force 47 countries to stop further fossil fuel extraction).
- Introduction of the concept of **advocacy** for children and young people's right to participation and involvement in formal discussions and decision-making regarding climate change.

Having a look at **national levels** (i.e. in Hungary, Estonia, Lithuania, and Romania), drawing from the collected data we highlight the following:

Hungary

- **Extinction Rebellion Hungary**
Hundreds of young people demonstrated in Budapest on Friday, 24.09.2021 in the Global Climate Strike, held simultaneously in more than 1500 locations in 92 countries around the world. In the Hungarian capital, the march started from the Opera House to Kossuth Square, demanding real climate action from decision-makers. Following Greta Thunberg's Friday protests, the Fridays For Future Hungary movement and activists from Extinction Rebellion Hungary marched on the streets with the message "There is a climate crisis, rebel!" In addition to the aims of the global demonstration, the organisers also protested against investments in Hungarian nature reserves. "In addition to many large lakes, such as Lake Fertő





and Lake Balaton, there are also investments taking place in nature reserves, and we think this is wrong, because the most important thing is to protect these habitats," said Fridays for Future's Hungarian organiser, Éva Macskásy. (Ács, G., Haragozó, O. (2021), Euronews online: Greta Thunberg Berlinben, Udvaros Dorottya Budapestben tüntetett a klímavédőkkel).

- **HOLNAPP mobile application**

The application has the goal to make the environment a hot topic among young people. The Hungarian app uses a proprietary algorithm to provide feedback on how environmentally aware we are and how we are improving in this field. The primary target audience of the app are youngsters between 15 and 20 years old. HOLNAPP is not only available for private users, but also for businesses, companies, non-profit or other organisations and municipalities.

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Estonia

- **Young Estonians have participated in Kliimakogu (Climate Assembly)** to make suggestions on how to change their living environment greener.
- **Negavatt**
Negavatt is a Green Ideas Competition in Estonia for 18-30 year olds, whose idea in the early stages will help to save resources and preserve the natural environment. Even if the proposed solution contributes only slightly, it is still important - every big change consists of many small initiatives. Best ideas get a funding and expert consultations to develop their idea into a proof of concept and then a best solution is selected and often developed into a market-ready product.

Romania

- **Extinction Rebellion Romania**, Cluj, București are created to animate activism for the environment like street walks and public debate, aligned with the values and goals of Extinction Rebellion international.
- **FFF in Romania** facebook page has 6000+ followers and up to date content. It presents itself as a group who militated for systemic change, rejects greenwashing and eco-capitalism.
- **Save Rosia Montana** (Environmental movement in Romania).

Lithuania

Fridays for Future Vilnius Twitter page ~500 followers (<https://twitter.com/FFFVilnius>, <https://fridaysforfuture.org/country/lithuania/>)





4. **Do young people (Gen Z mostly) perceive climate crisis and its urgency in that case as a negative legacy handed over, passed to them by the preceding generations?**

Young people who speak out against climate change typically **do not offer a general answer to the question** of how to prevent or mitigate the negative impacts of climate change, but **they do identify those responsible** (Székely, 2020). These are the **older generation** who run companies, countries, or as mere consumers. Partly as a way of naming those responsible, the **'OK boomer' phenomenon** has occurred. Smith (2020) argues 'OK boomer', the phrase, a catch-all dismissal directed toward older people by its primarily youthful users, became synonymous with what many have now warned is **a sign of full-on intergenerational warfare**. Almost six in ten Millennials (and five in ten Gen Z) believe that **Baby Boomers have made the world worse** for their generation (YPulse, 2020). Climate change generation gap means that young **people are more concerned about protecting the environment and addressing climate change than older people**. This sentiment was made even more salient after the school strike for climate pioneered in August 2018 by the climate and environmental activist Greta Thunberg.

While younger people are often thought to be most active on climate issues, they are more likely than older generations to **say there's no point acting in environmentally conscious ways because it won't make a difference anyway**. Williams (in the Forbes, 2020) emphasizes, when it comes to **reducing or reversing their carbon footprints**, evidence shows **older age groups are way ahead** of millennials and generation-Z. Considering the above statements, the hypothesis that young people (Gen Z mostly) perceive climate crisis and its urgency as a negative legacy handed over, passed to them by the preceding generations - is true, but the extent of the claim may vary from country to country. It is also important to note that **although the hypothesis is true**, the above findings prove that the reality is different: older generations are ahead of millennials and Gen-Z if it comes to reducing their carbon footprints.

Certain aspects of this 'intergenerational conflict' regarding the issue of climate change have been stressed in various studies (e.g. Sylvia Hayes, Saffron O'Neill, The Greta effect: Visualising climate protest in UK media and the Getty images collections, Global Environmental Change, Volume 71, 2021 ; Janet K. Swim, Rosemary Aviste, Michael L. Lengieza, Carlie J. Fasano, OK Boomer: A decade of generational differences in feelings about climate change, Global Environmental Change, Volume 73, 2022 ; Harriet Thew, Lucie Middlemiss, Jouni Paavola, "Youth is not a political position": Exploring justice claims-making in the UN Climate Change Negotiations, Global Environmental Change, Volume 61, 2020 ; Danielle F. Lawson, Kathryn T. Stevenson, M. Nils Peterson, Sarah J. Carrier, Renee Strnad, Erin Seekamp, Intergenerational learning: Are children key in spurring climate action?, Global Environmental Change, Volume 53, 2018, Pages 204-208), such as:

- Intergenerational conflict through the Greta effect as **intergenerational equity** (i.e. the perception of human community as a partnership among all generations)
- The attribute of Generation Z as **a generation manifesting more emotions, guilt, and concern for climate change** than the previous generations.
- The shift in young people **from intergenerational to intragenerational** climate justice claims.





- **Intergenerational learning** as an underutilized climate communication pathway (e.g. child-based climate communication as an understudied but promising pathway to incite climate action among children and adults alike).

Having a look at **national levels** (i.e. in Hungary, Estonia, Lithuania, and Romania), drawing from the collected data we highlight the following:

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Hungary

As stressed in several points in the 'green area topics' above, it seems that the hypothesis that young people hold the older generation responsible for the climate crisis (especially as experienced as an urgency) is true. The behaviours of young people (environmentally friendly **consumption models, trust in NGOs** rather than government or politicians in the fight against climate) are some of the **manifestations** of this hypothesis. Although not involved massively in collective activism, young Hungarians, within their closed mindset pattern, **seem to perceive climate crisis as a negative legacy** from preceding generations, and at the same time **believe that actions at individual level have not the power** to bring about considerable **change for the better**.

Estonia

There is **no direct evidence** showing that young Estonians consider the climate crisis and change as a negative legacy. As demonstrated above, compared to young people in Europe, Estonian youth belongs to the **less-worried group**. The involvement of young people in environmental issues is focusing on other issues rather than climate change as a global threat, such as littering and waste management. Issues that they themselves are elements of the climate crisis discussion, but as such, **less powerful to ignite an intergenerational conflict on the basis of climate crisis**.

Lithuania

According to a recent study, drawing from data about perceived **responsibility for tackling climate change** among young people across the EU, we can also assume the levels of 'generation blaming' in the issue. While in the most EU countries the most responsible actors to tackle climate change are the Business and industry (52%) and National governments (49%), the responsibility of the person comes at third place (34%). However, in the Lithuanian case (along with two more countries – Austria and Malta), **young people are considering themselves responsible by 49%**. Thus, by implication, and contrary to the EU percentage of perceived self-responsibility (34%), the **"you-did-it" followed by the "you-solve-it" factor is much less evident** in young Lithuanians. (Pan-European Survey – Main multi-country Survey: Ipsos by the #ClimateOfChange, led by WeWorld, 3.2.2021)

Romania

According to the EU Special Eurobarometer 501 Citizens Attitudes towards environment (2020), Romanians tend to **blame themselves**, as citizens in general, for not doing





enough to protect the environment to **a lesser extent than they blame the big companies and industry (80%), the Government (72%), EU (68%)**. Lastly, they put the least blame on local authorities (58%). Thus, it seems that established structures at the institutional level are those held responsible for the climate crisis at higher levels, but **the percentage according to which Romanians blame themselves is considerably high (67%)**.

Communication area research topics

Whereas in the Green area research topics we provided country specific data for Hungary, Estonia, Lithuania, and Romania where applicable, in the Communication area research topics demonstrated in this section, we present findings which offer aspects that are of horizontal nature. They outline communication profiles, preferences, and attitudes of young people as a social group in the way they construct and condition their communication identities, and the other way around – the way the young as actors construct and condition the communication channels (mostly digital) themselves, considering digital communication as a communication mode that has a rather global impact on how people of any age define communication as social, cultural, and personal interaction in the digital world.

5. Communication profile of young people (channels, attitudes, formats)

Young persons in the age group 18-25 are the main target group of the GreenCool project. This means that they belong to the earlier cohort (b. 1996 – 2004) of the so-called Generation Z (1996-2012). Generation Y (1980-1995) and especially its later cohort (1994-1995) is the one preceding them. This generations typology is of course not a definite clear-cut between traceable attitudes or behaviours. It puts however things into perspective in methodological terms, mainly because relevant research and literature use this typology to study populations across time and their economic or socio-cultural profiles.

Regarding Generation Z and its communication profile, the following aspects have been documented in relevant literature. Young people are more **easily influenced by social media influencers** and especially YouTubers who can influence lifestyle and consuming patterns and behaviours, which is not the case with Generation Y young who are resistant in influence or digital advertising. The younger generation values **credible, entertaining, and informative content, and style** (i.e. humour, dramatization, fantasy, nostalgia, status (ego), and testimonials) catches their attention. They are strongly **attached to technological devices** like the previous generation, but mostly on mobile devices. They are less of 'recipients' of information, but rather **prefer to express themselves through social media**, which is associated with their tendency to **create their own content**, including the creation and maintenance of their own **digital identity** or profile. In this respect, young people often associate themselves with certain groups, brand communities, or even celebrities; this so-called **social identification** is common in current life.

They prefer communication channels that are **beyond parental control** and have a **high average time of media usage** (approx. 5-6 hours daily). Having constructed their own





identities within digital communication as the 'natural' environment of communication among people, they have developed **media consciousness**, but on the other hand, because of the fast-changing environment (in terms of speed in technology developments as it accelerates the sharing of information), they seem to **lack the time of reflection and building of deep knowledge** about one thing, subject, or area. They seem to prefer **content** (e.g., info, advertisements) that does have a time span **not longer than 15-20 seconds**.

Trust in traditional media (radio, TV etc.) is equally low as it was also for the previous generation, kept at the role of 'companion' when doing something else or when multi-tasking. The concept of **FOMO (Fear Of Missing Out)** (i.e. the anxiety that an exciting or interesting event may currently be happening elsewhere, often aroused by posts seen on social media, might be missed out) has been reported as having a considerable impact on Generation Z young. In terms of social media channels, Facebook, WhatsApp, YouTube, and Instagram seem to be the top platforms used. (Bernschütz M. - Pethes B. (2015), Guld, Á. - Maksa, Gy. (2014), Pásztor, J. – Bak, G. (2020), Hack-Handa, J. – Pintér, R. (2015), European Commission, Standard Eurobarometer 92 (2019))

Considering the objectives, but also the limitations of this research activity, there are **no data at country specific level that might yield considerable results** about the communication profiles of young people in Hungary, Estonia, Lithuania, and Romania in particular. The findings as demonstrated above provide an overview of the communication profile of young people within the age groups that cover the last cohort of Generation X (Millennials) and the first cohort of Generation Z, which make the main target group of the GreenCool project. These findings will be **cross-fertilized** – as is the case of all secondary data – **with the results of primary research** as stated in the Introduction of this document, which will provide the partnership **with quantitative and qualitative data that are directly relevant at country level**.

6. "Incompatibility" between the terminology (jargon or non-jargon) used in mainstream communication and youth communication about climate change/crisis topics

While research shows different links between activism and science, **little is known about activists engaging in science communication online**. Demanding that decision-makers should "listen to the scientists", the climate movements **Fridays for Future (FFF)** and **Extinction Rebellion (XR)** emphasize the role of scientific knowledge in democratic decision-making in different ways. Exploring the two movements' hyperlinking practices reveals a difference in the extent and selection of hyperlinks on their websites, pointing to **influencer-based communication and focus on popularization of science** by FFF and **expert-based communication leaning on academic publications** by XR, with both movements acting as amplifiers of existing science communication efforts. (<https://www.nytimes.com/interactive/2021/10/31/climate/climate-change-sustainability-definition.html> ; <https://www.dw.com/en/climate-talk-decoding-the-global-warming-jargon/a-18877321> ; Rohden, F. (2021). 'Experts, influencers, and amplifiers – Exploring climate movements' hyperlinking practices'. JCOM 20 (07), A09).

In a recent study (<https://grist.org/language/study-climate-change-jargon-mitigation-tipping-points/>) it is stressed that **"...many people don't understand key terms experts use to talk about climate change"**, resulting in feeling **confused and**





eventually disengaged, although they might be in fact really concerned about climate change. Terms and phrases like **mitigation, carbon-neutral, zero net increase of carbon dioxide, tipping point**, are just some of the terms picked out by the scientific team which carried out the study, as highly unfamiliar or needlessly complex. This specific jargon seems to also enter the sustainability profiles of companies, promoting them as environmental-friendly, as for example a [carbon-negative sanitizer](#), or a [climate positive burger](#), further fuelling confusion. Thus, considering the area of **environmental marketing** (a communication area that adopts relevant terminology about environmental protection and climate crisis), there is an evident scepticism in terms of relevant marketing campaigns, encompassing the phenomenon of **“greenwashing”**, a term that refers to **exaggerated benefits or unsubstantiated claims** in support of the environment.

Many brands are focusing their green marketing efforts on social media, but it is a **double-edged sword**: the same speed with which a campaign can pivot toward green branding and appeals can also undermine the company's perceived sincerity and backfire (Pittman and Abell, 2022).

At a different level, one could co-relate the above findings with several misconceptions about climate change and the need for environmental actions. Some of them are summed up below as follows (Petra Buru, activist in FFF and <https://leadthechange.bard.edu/>):

- “The damage is done, our environmental situation is **beyond hope of repair.**”
- “Climate change and other environmental challenges are **not affecting me personally.**”
- “I live in the city. “Nature” and natural ecosystems are **“out there”** in the country or wilderness, so **protecting nature isn’t relevant to me.**”
- “I know there is a crisis, but **I can’t make a difference** in my ordinary life.”
- “We do not have to deal with the climate crisis [in Hungary], because **it will not affect us so much**”
- “Fighting the climate crisis is too expensive, not worth it.”
- “For the climate crisis, plant-based eating is the solution in every country on Earth.”
- “If the **advertisement / label has a green certificate**, that product is **“earth friendly”**, no matter how much we can buy from it.”

Regarding country specific data, in a similar approach, as was the case in the previous research topic (5), the findings demonstrated above provide an overall picture of the **perceived tension in the semantic properties of the language used in communicating climate crisis issues**, that seems to **pervade all countries, ages, and social groups**. The issue has been attended and discussed at a global level raising several questions: To what extent is climate change communicated as an urgency? **How accurately is it portrayed**, especially when people are bombarded through social media and else with **terms and concepts, that seem to be scientifically precise (or not so much), but emotively poor**? Not to mention climate misinformation on social media, as a substantial “player” of his own in the equation (Real Facebook Oversight Board, Nov. 2021). There is an ongoing discussion and trend, having started recently, which is **questioning the effectiveness of the semantic properties of the vocabulary deployed (the words, the terminology, the concepts), when reaching out to people** and society, regarding climate change and its impact. Climate scientists, the United Nations, [big media outlets](#), even well-known dictionaries, are increasingly introducing more





intense and direct terminology, **abandoning gradually a jargon that leaves people neutral**, or even worse, disengaged, simply because they fail to relate to the issue at hand in a clear and meaningful way, that should be reflected by this vocabulary in the first place. (<https://link.springer.com/article/10.1007/s10584-021-03183-0>).

A lot of research has been conducted on investigating **public climate change perceptions in different countries**. The way the public processes information, and how they perceive threats and other perceptions have a significant effect on how and to what degree mitigation and adaptation strategies are supported (Bjoern Hagen, Ariane Middel and David Pijawka, 2015). It is worth referring to a relevant study (From climate change awareness to climate crisis action: Public perceptions in Europe and the United States, 2020) which investigated and compared public climate change perceptions in eight European countries and the United States of America aiming to explain **the gap between the types of behavioural and policy changes needed and the climate actions to effectively mitigate climate change**. There are some important conclusions drawn up from the above study showing/giving more light to the direction towards the **design of a more interactive model of raising public awareness of climate change**, especially when it comes to young people.

7. Young people's perceptions of "influence" and "influencer" as trends that can shape people, attitudes, and outcomes

The concept of the influence and the relevant concept of influencer marketing have **evolved from traditional marketing strategies** such as print ads, celebrity endorsement, and digital marketing. Influencer marketing is in comparison to the previously used strategies a new phenomenon that had its major increase during 2016. An influencer is **regarded as a person who has built up a lot of followers on a social media platform** such as Instagram, and companies are today widely using these people as a marketing tool to reach out to their target audience in an effective way. Social media influencers are people who have leveraged various platforms to **cultivate themselves as a brand**. Social media influencers can effectively **influence their followers' decisions**; in smaller school groups, those students who have more followers on Instagram can become opinion leaders.

Trust towards influencers is based on the following:

- Influencers show themselves as people who are **easily identifiable**.
- **Day-to-day relationships** (by posting) creates **strong sympathy** (based on **similarity** between the follower and the influencer).

Unconscious internet usage strengthens the role of influencers among young people. The most important **characteristics** of influencers are **credibility and trustworthiness**. Influence is **not age-dependent** (older people's decisions can also be influenced by influencers' contents). The most effective tool of influencers are **visual content or short videos** which are much effective tools than lengthy YouTube videos, while **word-of-mouth marketing is not an effective way** for influencers to build their online community.





Originality and uniqueness are crucial factors if a user is to be perceived as an opinion leader on Instagram for example. The perceived **fit of the account with the consumer's/follower's personality strengthens the influence** of opinion leadership on the intention to follow published advice. (Luis V. Casaló, Carlos Flavián, Sergio Ibáñez-Sánchez, Influencers on Instagram: Antecedents and consequences of opinion leadership, Journal of Business Research, Volume 117, 2020).

Young people seem to not only design, edit and share content generated by them. In their effort to build a community of followers, they **become sophisticated strategists capable of awakening the support of thousands of people, members of a virtual community linked by the affinity of interests** that a given channel provides. Green advertising may therefore be part of a subset of niche markets wherein authenticity and trust optimally occur with a micro-influencer who avoids the appearance of "selling out."

Dance routines and cat memes are usually what goes viral on TikTok. But **young eco-influencers are racking up millions of views with videos on everything from trash to the rights of nature**. An example is **EcoTok launched in July 2020** by a Las Vegas high school student Alex Silva, who mainly posts videos on low waste living under the name "**ecofreako**". He sent an Instagram message to fellow activists with the idea. "Nature is the solution, so falling in love with nature is very much what we need to do. Nature has the capability to heal itself and we need to step back and let it do that." (Tur-Viñes et al. (2018); Pittman and Abell (2022); The Gen Z climate activists going viral on TikTok (2021); The 'green influencers' targeting the TikTok generation (2021)).

This rather **new group of green influencers** are informing their followers on topics related to sustainability, to raise awareness and tackle the problems of, for example, climate change or waste issues. A relevant study shows that the influencers are communicating with their followers and speak out for issues they deem important and want their followers to be aware of. But when **greenfluencers had too many followers** or their posts had too many likes, **participants trusted them less**, and had less favourable attitudes about the endorsed product. (Lehbrink (2020); Pittman and Abell (2022); Hutchinson (2021))

8. **The competence of young people to critically assess information as offered in the web, especially regarding climate and green topics**

Young people are open to green topics, but they **do not know many relevant information sources**. The main sources of information are **social media** (mainly Facebook) and direct **Google** searches. Which means that their knowledge sources are quite **scattered, unstructured**, and in many cases, the information contained in them is **not well-documented**. At another level, as pointed out in section 6 above, the effectiveness of the formal terminology and vocabulary used in the public and scientific discourse about climate change, is raising more **concerns in terms of understanding**, let alone **structuring** a clear position of the self, and a **clear attitude vis-à-vis climate change and crisis**, drawing from valid information and data.

According to recent studies, it has been stressed that "*...although students often recognise legitimate news sources versus opinion, they often fail to recognise bias when it relates to political or organisation affiliation...Media literacy instruction in schools needs to move*





towards an instructional approach that focuses on the more critical thinking aspects of evaluation, such as the source of the information, social and political bias, and verifying evidence and information through multiple sources". Furthermore, it has been documented, that **students need help from educational institutions** (during lectures, competitions, thematic days, etc.) to find reliable information on the web or to help them to **judge about** the different information's **content and validity**. Students at secondary education level acquire most of their knowledge within the framework of different subjects at school. Regarding high school students, it is those **opinion leaders who should be educated first**, since they have a huge influence on the students' opinion. (Nicole Johnston 2020 , Szűcs – Hámori, 2016, Szeberényi, 2020, Marjainé Szerényi et al., 2012, Marne Kendöl, 2019, Zubor, 2017).

Lastly, the issue of climate misinformation in social media and especially Facebook plays a highly negative role in this discussion. In November 2021 the **Real Facebook Oversight Board** which is an independent watchdog group in collaboration with the environmental non-profit Stop Funding Hear, having analysed a dataset of more than 195 Facebook and pages, released a report stating that "...The **scale of climate misinformation on Facebook is "staggering" and "increasing quite substantially"** ...An estimated 818,000 posts downplaying or denying the climate crisis, which have received a combined 1.36m views every day". The report states in addition that "...By Facebook's own count, the Climate Change Science Center receives about 100,000 daily visits globally – a fraction of the number of users who view climate misinformation". A [similar study](#) by the non-profit Avaaz reports at the same time **25 million views of misinformation related to climate science** and renewable energy **within just 60 days** only in the US.

Conclusions

The objective of the research as carried out by the GreenCool partnership was to identify and collect secondary data, **reflecting aspects of the involvement of young people in fighting climate crisis**, as well as the ways this involvement could be **further empowered by the means of 'influence' and 'influencers' as facilitators**. Thus, the communication profile and preferences of young people (age group 18-25), especially as studied with respect to social media, has been also explored.

The data as presented according to 8 research topics in two research areas ('Green' area and 'Communication' area) will be cross-fertilised with primary research data by the means of both quantitative research (online questionnaire to collect feedback from more than 400 students in secondary and tertiary education, young adults and influencers in Hungary, Estonia, Lithuania and Romania), as well as qualitative research (focus groups with social media influencers). The ultimate goal is to come up with a **well-documented profile of young people**, and especially students in tertiary education, **reflecting their 'green' and 'communication' profiles as agents and influencers in fighting climate change**. This in turn will lead the partnership to those methodological tools and pathways which are appropriate and effective in developing the GreenCool MOOC material and the corresponding ECoC Greenfluencer course with the provisional title: 'Attitudes shaping communication techniques and green related topics in the 21st Century'.





Drawing our initial conclusions from the findings at this research phase of the GreenCool project, we will try to outline the 'green' and 'communication' persona of our target group, which consists of young people at the age of 18-25, summing up key-characteristics that seem to be valid across the four project countries (Hungary, Estonia, Lithuania, and Romania), as well as across digital identities as constructed in the online world and are rather border-free. In this endeavour, we consider the following aspects as crucial:

- The online world is border-free, and as such makes the offline world and whatever happens in it, no matter the real distance, 'smaller'; coming through as relevant for our own micro-worlds and everyday lives.
- Information, as well as misinformation, travel equally fast and are easily accessible.
- Technology, the cyberspace, social media, the internet are more than functional, communication, and information channels in the world of young people (and more so at the age of 18-25); they are constituent elements of their world and their own identities.
- Climate crisis and climate change (as is true for any other topic at local or global level) are thus mediated, constructed, deconstructed, challenged, contested, justified, interpreted as filtered by the online world, acquiring to a great extent their meaning by and through the online discourse which consists of written discourse, sound, and vision.

In the table below we summarise the findings of the secondary data research as demonstrated in this document across two axes:

- In the left column of the table we provide **'statements' on the 'green' and 'communication' profile** of young people (focusing on the age group 18-25) as drawn from the findings (*what young people think, feel, do*).
- In the middle column we provide **recommendations** (*what should be amplified, moderated, eliminated, transformed towards making young people becoming knowledgeable and actively engaged in fighting against climate change?*).
- In the right column we provide **challenges** (*which are the challenges for the GreenCool partnership in turning the suggested recommendations into a methodological approach for the development of the GreenCool MOOC material and the corresponding ECoC Greenfluencer course ?*)

It should be noted, that **'Recommendations' and 'Challenges' should here be considered as complementary to each other towards indicating and suggesting educational material as planned**, in the sense of both its direction and scope (recommendations), as well as the considerations in the process of fleshing out this direction in the form of educational/pedagogical content (challenges). Those statements (as documented hypotheses) - as well as recommendations and challenges - will be cross-studied and analysed with the finding of primary data research which is carried out in parallel. They will contribute as foreseen in the development of effective discourse and material (narrative and visual), that correspond to both in empowering young people's and especially students' responsiveness to green topics, the 'influencing' techniques that are most appropriate in this process, as well as the 'green' topics which call their attention, and the way they are communicated vis-a-vis the way that should ideally be communicated so that they are more relevant to their own perceptions, but also transformative with respect to those perceptions.





Empowering the 'green selfs' of young people as agents and influencers in fighting climate crisis

'Green' and 'communication' self of young people	Recommendations	Challenges
<ul style="list-style-type: none"> Extremely worried, amplified by feelings of fear, sadness, anxiety, anger, helplessness, powerlessness. 	<ul style="list-style-type: none"> Channeling depressive feelings and emotions towards agency at personal and collective level – Making them conscious of their determining role as a distinct social group. 	<ul style="list-style-type: none"> Identifying the correct discursive means, that can overcome the feelings of 'nothing can be done' vis-a-vis 'a damage done'.
<ul style="list-style-type: none"> Higher levels of involvement at the individual (activism at home), rather than collective level. 	<ul style="list-style-type: none"> Encouraging 'activism at home', but however, endowing it with the notion of a collective life-style that can be communicated through actions that have a collective impact themselves (making individual life-style publicly known by promoting it through digital and not only means). 	<ul style="list-style-type: none"> Infusing the responsibility of the individual towards society. How impactful practices and everyday activities fighting climate change in own micro-world should be communicated and promoted - to schoolmates, friends, family, irrespective of the result.
<ul style="list-style-type: none"> Pronounced, real-life exposure and experiences to climate crisis consequences, that go beyond the scientific discourse discussing the issue. 	<ul style="list-style-type: none"> Provide young people with skills that can transform scientific, journalistic, expert discourse about climate crisis into creative communication discourse (e.g. drawing connections between climate crisis topics and future planning, professional and personal aspirations which initially seem to be disconnected from 'today's' 	<ul style="list-style-type: none"> Development of meaningful examples. Explaining the processes of abstract thinking, that connect the future agency of a young person with climate change. Building on selected skills according to EU GreenComp





'Green' and 'communication' self of young people	Recommendations	Challenges
	<p>climate crisis discussion)</p>	
<ul style="list-style-type: none"> Active participation in worldwide impactful activities and movements (e.g. FFF, Extinction Rebellion etc.) is not massive and consistent, and also varies across countries. 	<ul style="list-style-type: none"> Identification and demonstration of the reasons for that, as well as the outcome, the impact of those movements (what is/was attractive and what not?). Connecting young people with collective action and movements of the past – creating an intergenerational community through time, that is, from the past, to the present and into the future 	<ul style="list-style-type: none"> Overcoming methodological difficulties in approaching and making the recommendation meaningful and presentable (i.e. attending the respective socio-cultural contexts and intergenerational tensions in their own historical contexts)
<ul style="list-style-type: none"> Blaming the older generations for climate crisis but not explicitly. Higher trust and hopes for fighting against climate change are invested in NGOs, local communities, rather than governments, the leaders in economy and industry. 	<ul style="list-style-type: none"> Promoting the concept of intergenerational equity rather than intergenerational conflict Promoting intergenerational learning through climate communication (e.g. climate communication as intragenerational or cross-generational as for example from persons at the upper cohort of the age group 18-25 to them at the lower cohort i.e. 18 or less) Deploying methodologies like for example role-playing workshops where participants represent past, present and future generations, taking responsibility and 	<ul style="list-style-type: none"> Developing inspirational material (preferably visual and scenario-based, rather than narrative) that promotes climate change as an urgency of today, while at the same time transcends into the long duration (past and future).





'Green' and 'communication' self of young people	Recommendations	Challenges
<ul style="list-style-type: none"> Easily influenced by social media influencers Prefer credible and entertaining content Prefer visual, short but meaningful content rather than narrative Co-creation of content The wide outreach (followers) of an influencer doesn't always work in a positive way Spend much time online and on social media in particular, running the risk of FOMO and the related anxiety issues (Fear-Of-Missing-Out) 	<p>being accountable to each other.</p> <ul style="list-style-type: none"> Allowing for high levels of co-creation of content (i.e. not instructional, top-down approach). Ensuring credibility of content. Promoting visual elements and short to medium duration in topics integration. Promoting 'influence' on the basis of valid and verifiable arguments, rather than the influencer as agent and authority 	<ul style="list-style-type: none"> Adjust content, style, and discourse used on the issue and goal of promoting 'greenfluencing' to several socioeconomic profiles of young persons within the age group 18-25 (e.g. gender, educational background, national identity, relationship with social media etc.)
<ul style="list-style-type: none"> Can become confused and eventually neutral, disengaged, or worse, negative, when they can't relate to or understand the climate change jargon 	<ul style="list-style-type: none"> Avoiding scientific jargon as a means of communication climate change and crisis (discourse), while deploying at the same time scientific jargon as a means of validation (i.e. as a way to explain why rather than what) 	<ul style="list-style-type: none"> Need of glossary and conceptual guidance that should be tested and validated as effective
<ul style="list-style-type: none"> Credibility, trust worthiness, sympathy, originality, uniqueness are the 'winning' qualities of an influencer Quality of communicated material or opinion matters more than quantity of followers and audience 	<ul style="list-style-type: none"> Development of skills that allow credibility, worthiness, sympathy, originality, uniqueness to be expressed in written discourse (online, social media), but also in visual, audio or other means of communication 	<ul style="list-style-type: none"> The mentioned skills that have to do with the recommendation as provided might be hard to be formed, as well as 'taught' within the scope of educational material, as they touch upon interpersonal as well as intrapersonal skills, which can be challenging for the particular age group (18-25)





'Green' and 'communication' self of young people	Recommendations	Challenges
<ul style="list-style-type: none"> • Having to deal with scattered, unstructured and often not well-documented information • Lack critical assessment and thinking skills • Having to deal with misinformation which can be hard identifiable as such 	<ul style="list-style-type: none"> • Developing skills for the creation, communication, as well as the critical assessment of 'what is written online' and especially social media 	<ul style="list-style-type: none"> • The recommendation can have a very wide scope and touch upon various areas (e.g. use of emotive and rational language, assessing credibility and validity of information by cross-examination of multiple sources, assessing credibility and validity from the visual, narrative or other context that complements the information etc.)





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Appendix 2. Focus group interviews analyses

GreenCool - Let me influence your green self! - Skill development in the encouragement of mindset towards environmental awareness and sustainable development in the alliance of ECoC

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Focus group data (among influencers) thematic analysis

For the data analysis was employed applied thematic analysis (Boyatzis, 1998; Guest, MacQueen, & Namey, 2012) to structure the data. Thematic analysis means “identifying and describing both implicit and explicit ideas within the data, that is, themes” (Guest et al., 2012: 10) across qualitative data in a transparent and structured manner (Nowell, Norris, White, & Moules, 2017). Applied thematic analysis is “a rigorous, yet inductive, set of procedures designed to identify and examine themes from textual data in a way that is transparent and credible.” (Guest et al., 2012). The result is a rich, analytical description of the data that is accessible to interpretation. Themes are being actively generated by the researcher (Braun & Clarke, 2006), as it was chosen to conduct an inductive analysis, which led to an analysis driven by data rather than theory.

The thematic analysis data have been derived from focus groups interviews made in four countries with young people, aged between 18 and 25: Hungary (6 participants), Romania (8 participants), Estonia (7 participants), Lithuania (6 participants), totally – 27 participants, (Figure 1).

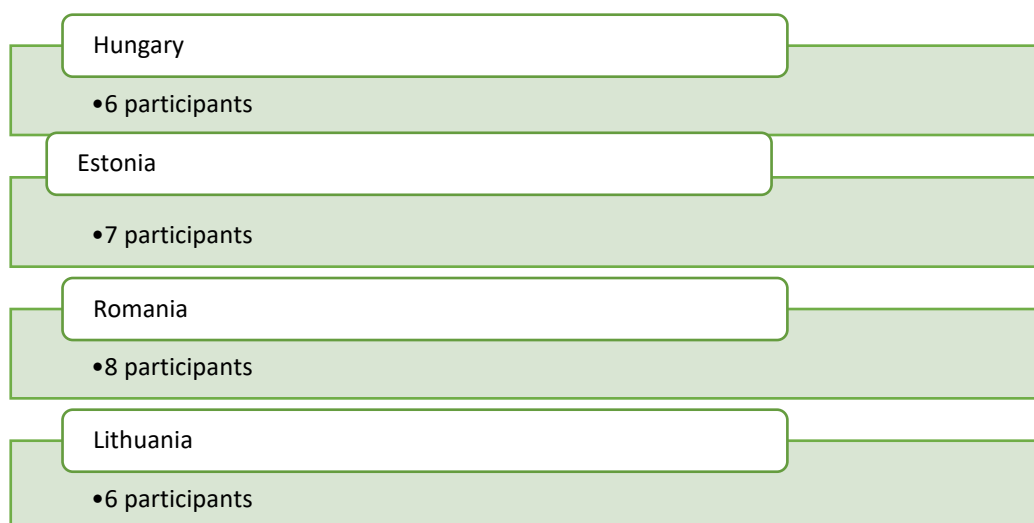


Figure 1. Focus group participants per country



The Focus group thematic analysis is structured in two levels of depth. The first level defines fundamental analysis themes, linked to "What about" questions: What about profile of the participants?, What about influencing?, What about communication channels and techniques?, What about the content?, What about favourite influencers for young people?, What about young people and green attitudes?, What about dark side of green communication?, themes are presented in Figure 2.

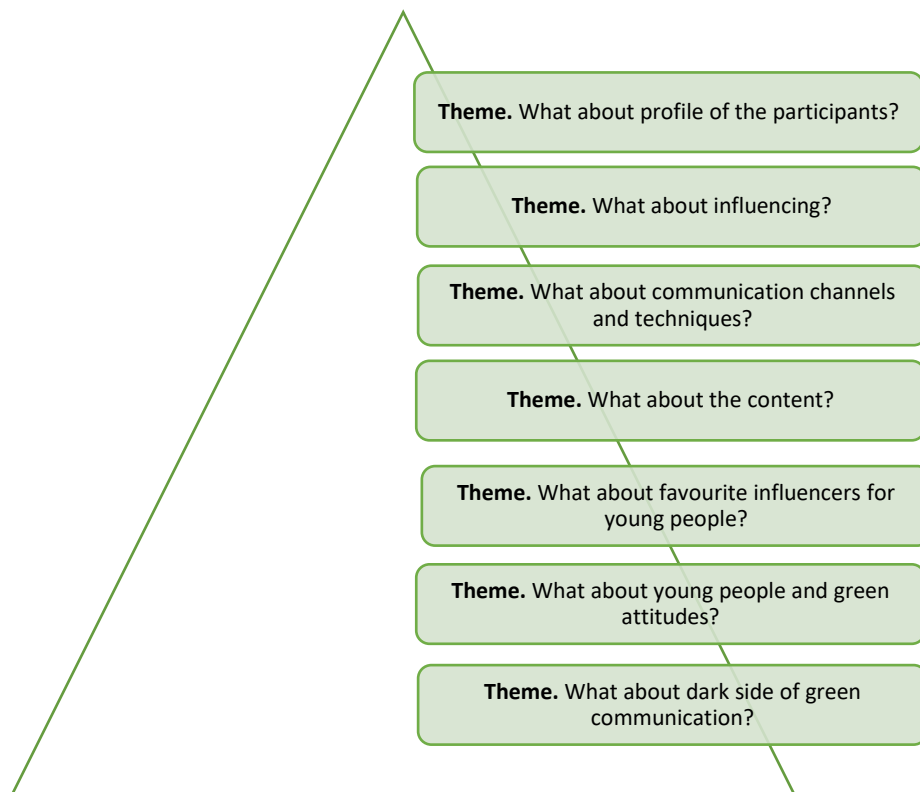


Figure 2. Themes of focus group thematic analysis

Thus, the first level shows and describes 7 fundamental themes and second level lists 27 related subthemes. Therefore, the thematic analysis resulted in the identification of 6 themes as fundamental ideas that allowed for a deeper description with subthemes and examples and explanations from focus group data (Table 1).



Table 1. Thematic analysis of focus groups data. Focus groups participants ideas are presented in different colours (by country): Hungary – green, Romania - black, Estonia - purple, Lithuania – blue.

Theme	Subtheme	Examples and explanations
What about profile of the participants?	Age of participants	<p>Eight young people, aged between 18 and 25, participated in the focus group in physical presence</p> <p>Five young not just green influencers participated in the focus group in physical presence, one was online.</p> <p>2 young not just green influencers participated in the focus group in physical presence, and four of them were participating online.</p> <p>Seven young people, participated in the focus group online.</p>
	Field of studies	<p>Their fields of study are varied: communication, journalism, psychology, digital media, political science and geography.</p> <p>Their educational backgrounds are different: two of them are in grammar schools, others are studying or working in the field of communication, political sciences, e-commerce and e-marketing and managing a green shop.</p> <p>Their fields of study are varied: communication, teaching, psychology, digital media, biology and geography.</p> <p>Their fields of study are varied: management, rural studies, communication, education, e-commerce and e-marketing.</p>
	Areas of interests	<p>Their areas of interest are communication, social media, entrepreneurship education, storytelling, environment and advertising.</p> <p>Their areas of interest are mainly communication and social media activities such as storytelling about green products /programs/events etc., organizing and coordinating environmental activities in relation to zero waste, re-use & recycle or organising garbage collection and furthermore consulting and organizing trainings.</p> <p>Their areas of interest are communication, social media, entrepreneurship education, storytelling, environment and advertising.</p> <p>Their areas of interest are management and communication, social media, entrepreneurship education, storytelling, environmental issues, green topic.</p>
	Current activities	<p>Their current activities, often voluntary, focus on design data analysis, blogging, interacting with children, coordinating a magazine promoting volunteering, online marketing and social media</p>





		<p>management, involvement in the structure, copyright, media or coordinating a geographical association.</p> <p>Their current activities also include activities as part of their business profile (Z generation trainings and consultations, zero waste actions, green shops advertisement) and very often voluntary (such as environment cleaning campaigns, blogging – sharing experiences). All of them are involved in green events, interacting with young people, volunteering, blogging, social media management.</p> <p>Their current activities include: zero waste blogger and waste prevention and greening trainer, a teacher and head of an NGO that is active in climate politics, head of marketing management in Pärnu (city in Estonia), Green deal for hotels manager and leader, green cluster theme leader, student ect.</p> <p>Two of them could be called institutional influencers, as four of them - more connected with individual influence and small, but green business initiatives.</p>
What about influencing?	Not considering myself as influencer, but influencing	<p>Twelve out of eight people <i>do not consider themselves influencers, meaning a person who creates quality content and who has to convey entertainment to those who follow them, but also a person who, for financial purposes, creates content that has a marketable purpose as its primary quality.</i></p> <p>Most of them are not really consider themselves influencers. They did not built up their influencing career consciously – they shared some opinion which had impacted others who commented and frequently sharing views, opinions created their „community“. So in this approach, being an influencer was created by the followers (ordinary people or media).</p>
	We are all influencers	<p>Two other people consider that we are all influencers in some way, because we post content that influences our close circle or write articles (in magazines, online) that succeed in influencing.</p>
	Offline influencer	<p>Another approach is that of the offline influencer, who considers their own positive example to be more impactful on others, the example of a youth NGO leader who succeeds in mobilising young people to do good things in society. (T)</p> <p>Another approach that influencer is not only online, you can also see offline influencer such as the owner of the green shop, packaging free shop owner, who shares her insights with shoppers or someone in the local community</p>





		<p>who set up a positive example to be impactful on others.</p>
	<p>Definition of influencer</p>	<p>In general, the influencer is defined as someone who has influence on others through the stories they tell, the example they set and their ability to mobilise young people.</p> <p>A real influencer should be out for one specific area/topic – like political issues, green cosmetics – this way all followers can get into deeper knowledge and insight of the broadcasted area.</p> <p>In general, the influencer is defined as someone who has influence on others through the stories they share, they tell, the example they set and their ability to mobilise others. (P)</p>
	<p>Negative side of influencing</p>	<p>They agreed on that the word „influencer” has a negative meaning nowadays – as people see this is a short term financial activity, to promote products for financial reasons. Most influencers focus on several specific products or areas of activity – they are not authentic – it feels they post due to financial interests.</p>
	<p>Influencer skills</p>	<p>They identified that influencer should be as a person</p> <ul style="list-style-type: none"> ▪ who is able to mobilize others for important issues and to do good things in the society, ▪ who set an example for others to follow, ▪ who creates quality content to spread messages, ▪ who use words, pictures, but most of the times pictures are more efficient to highlight important green topics, <p>who creates content for financial purposes, which has marketable purpose the influencer has the desire to share.</p> <p>Most influencers who people follow will go to three categories: who give me specifically interesting information for me, who can connect with me and those who give information about specific topic like financial wisdom or zero waste (EST).</p>
<p>What about communication channels and techniques?</p>	<p>Communication channels</p>	<p>The most commonly used communication channels are the big platforms (especially TikTok, Instagram and Youtube, but also Facebook, WhatsApp and Medium).</p> <p>Some of them do and all of them have some kind of presence in the social media. Some use their personal accounts and some post from their work accounts.</p>





		<p>The most commonly used communication channels are the big platforms (especially TikTok, Instagram and Youtube, but also Facebook, WhatsApp, LinkedIn).</p> <p>News feeds and same-day posts (bold), use Tok only - up to 18 years. (it's more of a tool, and material created by FB and Instagram), Instagram - 25 - 35 years old. (to increase brand awareness), FB - 40.5 m. average age, Google business, Instagram and FB combine and repeat the same information, the age of viewers is different (combined 4 years ago)</p> <p>Platforms are changing by time to time – they are also using offline channels such as special conferences, meetings, events for primary and secondary school students. The „targeting” is very often used offline media – where people make notes in the area of interest (eg. new investments around the university). Among offline channels, some of the influencers have good contacts with local newspapers, local media (eg. for instance organising re-use clothes or make a clothes selling workshop). With online channels they are able to reach wider audience.</p> <p>The most commonly used communication channels are the big platforms, like Instagram and Youtube, up and coming TikTok but also Facebook for a bit older audience. Also their own web pages and blogs are also channels they use, a lot of the time they will add some information on their Instagram post and if you want to read more there is a web page link. Also in Facebook it is good to share their blog posts and also a lot of Instagram posts will go automatically to Facebook. Furthermore, in Facebook you can share your content to groups that are thematic. Some people also use Facebook to share articles and to bring people to their webpage. Facebook adds are also used to get people on their pages. LinkedIn is used for getting contacts and to get to companies, also to get a little bit different audience than in Instagram.</p> <p>Who decides which platform to use: It is determined by age groups and what audience you want to reach, content is very important, because you will not reach young people, it must fit the general image of the platform.</p>
	Communication techniques	The techniques are varied, depending on the profile of each: some use open data and





		<p>translate it into the language of the general public, others combine writing with images and others deliberately make themselves vulnerable by telling their own stories (description of experiences, take away practices, introspection) in which the audience can find themselves, others use short videos.</p> <p>The techniques are varied, depending on the profile of each users and from the quality and quantity of content and also from the purpose of influencing activity. For instance the Instagram is more general but also more creative, while Youtube is more specific, TikTok is often considered as funny channels. TikTok is also very powerful now as the content reaches wider audiences who might go after specific contents after seeing a TikTok video.</p> <p>The techniques are varied and influences will do videos, pictures and add some writing or talking. The quality of visual content is important they should be simple, colourful, eye catching. The pictures are important and give very good information. In a general, influencers believe that the information should be short and to give out information in small quantities.</p> <p>Simplicity – very important to try to be as simple as possible showing daily life in social media posts.</p>
	<p>Communication techniques as inspiration</p>	<p>In a general way, interviewees believe that the best influencing techniques are those that inspire people's confidence, that emphasize vulnerability but also the idea of Good.</p> <p>Individual experience – the importance of sharing unique individual experience.</p> <p>Welfare – the importance of influencing, trying to make impact on individual welfare as well as on public one.</p> <p>As we are a small horses farm, then we try to find interesting content, there are a lot of them on Tik Tok, an animal and a little girl are very popular, the symbol of a pony and a little girl is popularized in the stud farm, horse farms have to create and publish content themselves, LT does not have inspiring horses content yet, more foreign history inspires.</p>
	<p>Communication techniques perspectives</p>	<p>Another perspective is where a community is created around a particular group (using social media groups), around an ideal, and the semi-closed group solidifies.</p> <p>Among the influencers there are particular ones who used facebook and instagram where the followers created their semi-closed groups</p>





		based on sharing the geographical location.
	Online-offline channels connection	If you're just doing it online and it doesn't go to life, then it means nothing. Work for work. Virtuality must serve for reality. There is also one influencer who created a website (8200.hu) with other colleagues dedicated to activities in Veszprem region. They became the most influential and read magazine in the region of Veszprem dealing with important issues for locals (politics, environment etc.). In general, it can be stated that locally the offline communication channels are more effective with the support of online channels.
What about the content?	Importance of visual content	Then, the quality of visual content is important (simple, colourful, friendly or live), as well as raising awareness messages (e.g. through challenge campaigns, trendsetters). In parallel, it is important that a given content is posted on several different platforms, depending on the specifics of each (e.g. Tik-tok funny, Facebook - serious, Instagram - creative, etc.). The quality of visual content is very important – It should be colourful, friendly and attractive enough to raise awareness. Some of the influencers are using more pictures with small texts and data, sometimes they make more content by telling their own experiences, stories, some of the also use short videos. Many young people want to learn how to get people to watch their stuff. How to do nice pictures and how to do interesting videos that people will want to watch (EST). The young people interviewed want to learn how to build complex scripted videos or the diametric opposite - editing very short 15-20 second videos. Real visuality – the importance of the social media content to make it real, not to overphotoshoped, not too beautiful, the importance of showing realistic visual content as much as possible. People really like that simplicity. A lot of rejection is received by the filtered photo to realize that it is not an illustration, "Daily life". What is perfect gets boring very quickly.
	Importance of storytelling	On Instagram, mutual communication is very important, when you comment, you are commented on, it is very important how you manage to include in your story, the material is as every day, natural, witty as possible. If this is interesting, you are supported. In parallel, skills in storytelling or tagging techniques for video platforms (youtube) are





		<p>desired. More broadly, young people want to be able to know how to stay relevant, how to give the audience what they want to hear or how to address things instantly, at the right moment.</p> <p>Stories - must be as daily bites, 80 percent time people spend in the fat section is the spread of the product content itself, Instagram increases brand awareness.</p> <p>Content is dependent by weather, seasonality, reactions, comments, views, shares.</p> <p>Understanding comes per time and experiences.</p>
<p>What about favourite influencers for young people?</p>		<p>The profile of favourite influencers is varied. Influencers were cited from the cooking area, Alina Ceuşan for fashion, Sanziana Negru for reels, Valeria Lipovetchi for exemplary mix of family life and entrepreneurship, Georgiana Ionescu for lifestyle or Cristina One for creative photography. However, some feel that chasing an influencer can put us in a constant inferior position, which is why some have unsubscribed. In the same vein, companies tend to show an end product, not the process or carbon footprint. (T)</p> <p>Sources of inspiration - Mega global stars are inspirations/teachers (lessons), watching them, changing attitude, understanding, learning how to use effects, ideas, learn, and apply in your messages.</p> <p>The interviewed influencers want to learn how to build complex scripted videos and also editing the short videos. They highlighted the need of elaborating TikTok and Youtube videos – how to make digital storytelling. How to influence people with feelings, emotions are very essential skills – to find the proper way of storytelling, the form of communicating, how to address the target group continuously.</p>
<p>What about young people and green attitudes?</p>	<p>Green approach</p>	<p>Reflecting green topics is of real interest to young people in a heterogeneous approach. This approach is not just limited to carbon footprint or global warming, but also includes issues related to nutrition and responsible consumption, urban lifestyles as a whole, urban mobility, sustainability of public spaces, the amount of small household habits or air quality. Attention is also drawn to recycling from a critical perspective (e.g. how companies recycle, the amount of consumption in bottled packaging or the amount of things to recycle after a major event), which requires concerted public policy pressure.</p>





	Green living	Green living is in fashion at the moment for young people and also in entrepreneurship is a lot more in it. They try to find ways how to do things more environmentally friendly.
	Green themes/ issues	<p>The themes of zero waste and sustainability are evoked by some respondents, with the caveat that zero is an almost unattainable goal, but it is important to communicate it in this way to attract attention. Green mobility issues are suitable for influencers, as they apply to the daily lives of millions of people and can promote tangible and applicable alternatives in everyday life. The theme of collective social responsibility has also been raised in the idea of a common thinking and responsibility at the planet level, which also enhances the quality of life at community level. In another register, the idea of climate change is seen as going beyond the simple warming of the planet, but calls for a number of topics of communication and education of the population, including in the sphere of financial education, in the sphere of individual social responsibility, which requires rapid and effective methods to be implemented globally.</p> <p>There are different interests among the respondents in related to green topics. They have a wider approach to green issues which is not just limited to global warming and CO2 emissions. The most highlighted green issues are (not by their importance):</p> <ol style="list-style-type: none"> 1) <i>Waste management</i>: this is the most visible on the local level. Attention is related to the selective garbage initiatives on the individual and company's level. Draw attention to waste consumption on festivals, events, eg. the single times used plastic forks and disposable plates. 2) <i>Climatephobia, anxiety</i>: it is more common among young people, so they are our target group. Climatephobia is not very relevant above 50, among that generation it is hard to change it. 3) <i>Circular economy</i>: They suggested to focus on the generational approaches – what interest them, how to communicate and reach them. There are big differences in relation to consciousness due to lifecycle groups and sub-cultures. 4) <i>Ethical thinking</i>: eg. on responsible consumption, and wastage, food waste: due to Covid and inflation people are more aware of





		<p>sustainability, we consume less and so the cost of wastage is higher.</p> <p>5) <i>Greenwashing</i>: not everything is green what it is told to be. Eg. gadgets, green pencils?</p>
Green activity	pro-	<p>Young people are generally pro-active to change, but they need to be encouraged, otherwise they risk remaining just rebellious. This is why intergenerational projects are more likely to succeed, especially if they are integrated into international networks. This is especially true in a country that lacks the reflex of recycling and green behaviour.</p> <p>People are also no more inclined to have green sources of energy and electricity. One point is that it is important for security reasons not to get energy and electricity from countries that are in war and can influence us through the fact that we need their energy. The other reason is that we want to get away from the techniques that are polluting our living space. Rather than get electricity through coal we want to get it from sun or wind or water so it could be sustainable in the long run also. Young people feel like the older generation does not listen to them and do not care. Most of the people who are actually making the decisions are older and do not care about the environment.</p> <p>Young influencers sometimes don't even understand the content, what they do and why. Little girls trying to be influencers are showered with gifts from companies, they show it off, they are proud of it.</p> <p>There are shops in the biggest cities in Estonia that sell their products in zero waste fashion. For example you can buy pasta in your own glass jar or you can buy meat in glass containers etc.</p>
Green topic and public events		<p>Respondents also referred to public events with a green component and examples were given of themes related to safe mobility, the importance of coercion, payments and fines if certain standards are not respected. However, some young people educate themselves on these issues precisely in the online sphere, where they have access to a global community with similar concerns. (T)</p> <p>There are many events that already do some things to be more environmentally friendly. For example there is a company that provides reusable cups for parties and clubs in Tartu, so you can go from one club to the next with the same cup and just can get the drink to that cup</p>





		<p>again. And they also work at festivals where you can buy your drink to the same cup from many vendors and at the end you will have to give the cup back and get like 3 euros for bringing the cup back or you can keep it. There are also recycling bins in many festivals, malls and also offices. Furthermore in the last years the movement for zero waste has also gone bigger.</p> <p>The openness of the audience is very important here.</p>
	<p>Green education and communication togetherness</p>	<p>EDUCATION & COMMUNICATION are essential. To make them feel the relevance, to feel it personal, to feel it important, to feel it trendy and sexy and teach them that each of us can make a difference. (P)</p> <ul style="list-style-type: none"> ▪ Bring closer the problem and the possible solutions – to see by themselves ▪ „Small steps, big result” ▪ Not important to be perfect, you cannot be green at once in all areas, but you can start today with small actions eg. selective garbage, re-using, re-cycling, go once a week to the local market.... ▪ „ there is no black and white in this issue” ▪ „we need to be more proactive” ▪ „Each of us have collective social responsibility how we live our everyday life. It is our responsibility and depends on us to have a good quality of life in a quality environment” <p>Young influencers are also aware of the fact that the cost of sustainability is very high on a macro level - „not everything works properly, e.g. selective garbage, energy politics”. We see the power of politics.</p> <p>It was needed to do yesterday, you need to start with yourself first. If we have the opportunity to broadcast this in the environment and try to do so, we are going in small steps. Young children already learn to sort, it comes from educational institutions, from parents. 18 - 20 m. young people care less about comfort, they care more about impact. We see change, and for them it is a reality, a cultural norm. (LT)</p>
<p>What about dark side of green communication?</p>	<p>Green washing</p>	<p>The other side of the coin is evoked by young people by the fact that often some green ideas are taken up and communicated by some companies just because it gives them a better image. Other businesses use the concept of clever eat or fast eat, but the costs of sustainability are very high.</p>





		<p>Also, in the public sphere recycling is not properly managed (neither as a punishment nor as a reward), which discourages people from recycling properly.</p> <p>Green has also a negative side. There are misinterpretations of sustainable initiatives of companies. E.g. The bio-organic products are more expensive, it also relates to prestigious consumption, as it is highlighted by one of respondents that „we just buy it for demonstration, for prestige effect, not for its real value“.</p> <p>There are also shops that are zero waste and try to find ways how to get the packaging more environmentally friendly. Greenwashing is also a problem, a lot of companies just try to seem green but do not change anything.</p> <p>Who are the "Green" people - they are units among students. It is very important to filter the information if it is really green and looks like a "Green" person on the outside, but not on the inside. It is one thing what one declares, and another how one lives, how I live myself. Consumerism keeps catching up.</p>
	Green guilt	<p>If you are not as green as the influencer, who are you following - it is better to disconnect for a while – you will not be so guilty living as you live - not so green.</p> <p>Green influencers have not found one who has a healthy, not a chauvinistic approach, it cannot be changed overnight, it takes time. There is black and white and there is no gray area that is the most.</p> <p>But some young people might be a bit afraid to be green because of what others might think of them and for them it is easier if there is some influencer to follow on their path of going green. For example being vegan is sometimes ridiculed and just thought of as a fase, that will go over at some point.</p> <p>It is very difficult to convey this to someone else, to present it convincingly, without being the one who nurtures green ideas. You say - you buy responsibly, but do I do it myself? After all, my choice is determined by convenience or cheapness (promotions) and every time I promise myself that this is the last time.</p>
	Gray zone	<p>Gray zone – the importance of not being just in one side black wrong or white/right side when sharing "green" worldview.</p> <p>A lot of misinformation. Broadcasting live from space. Puts content with such confidence that no</p>





		filters are used, and there is no logic in FB and it defies all logic.
	Challenging communication	<p>The explanation why to do something should be short and easy to follow as people do not have so much time to read and research about everything. For example to find out if the product they are using is actually green or not. It takes a lot of time and effort to determine if the product is actually green or they have done some greenwashing and most people do not have the time to do it.</p> <p>Declarative presentation and everyday life challenges.</p> <p>I show it too little, I have in mind, even the manufactured fertilizer can be used perfectly, we show it too little, we are together with nature, but we don't use it.</p>

Summarising focus group data thematic analysis derived from focus groups interviews made in four countries with young people, aged between 18 and 25 in Hungary, Romania, Estonia and Lithuania, could be noted, that there is not noticeable very big difference among the participants opinions per countries. When looking to the profile of participants it can be noticed, that the study represented relatively similar groups of participants and their age, field of studies, areas of interests, current activities. When looking to the meaning of influencing, it could be noted, that often focus group participants do not consider themselves as influencers, "meaning a person who creates quality content and who has to convey entertainment to those who follow them". But on the other hand, it is interesting to note, that there are some participants considering that "we are all influencers in some way" or noticing, that "influencer is not only online, you can also see offline influencer". It is also noticeable that representatives of Hungary and Romania delve more deeply into the very concept of influencer. When discussing communication channels and techniques, it could be noted that all group participants are active sharing their ideas and experiences in various platforms such as: Tik Tok, Instagram, Youtube, Facebook, WhatsApp, LinkedIn, etc., and noticing that "platforms are changing by time to time". When discussing the content, participants of all groups share their ideas about visual content as well as the content using various storytelling tools and inspirations, noticing that: "people really like simplicity and authenticity". And when discussing the role of young people to green attitudes, it could be seen more active participants from Hungary and Romania, noticing that "reflecting green topics is of real interest to young people in a heterogeneous approach". However, it can be noted, when discussing the dark side of green communication, more critical opinions emerge among Estonian and Lithuanian participants. At this point, it is important to emphasize that, it should not be said that more critical opinions prevail in the mentioned countries, it could be noticed that just more





critical representatives of Estonia and Lithuania took part in focus group. Thus, summing up the experiences of the research participants, it is noticeable, that the research participants revealed as active and creative young members of nowadays society, paying attention not only to green communication, but also seeking to be active participants, changing the public's attitudes to climate change issues.





Appendix 3. Questionnaire result

Comparative analysis between countries

- Interpretation of the survey results -

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The country structure of the sample used in this study is as follows: Estonia 69 respondents (9.7%), Hungary 141 (19.8%), Lithuania 96 (13.5%), Romania 395 (55.5%), other countries 9 (1.3%) and respondents who refused to declare their country of residence 2 (0.35%). The language of application of the questionnaire was the mother tongue of each country involved in the study, which was declared by 100% of respondents in Lithuania and Romania, 97.9% of respondents in Hungary and 95.7% in Estonia.

Regarding the socio-demographic analysis of the sample, it is characterized by a more substantial presence of female respondents, with a share of 69.6% in the whole sample. The gender structure of the sample in each country is close to the overall average in Hungary (70.9%) and Romania (69.9%) and further away from it in Estonia, where we have the most feminized sample 79.7%, while in Lithuania we have the most balanced ratio between men and women, the share of the latter being 58.3%.

The age structure of the sample in Estonia is relatively similar with respondents aged 18-21 (31.9), 22-25 (42) and over 25 (24.6). In all other countries respondents come mainly from one age category: 14-17 in Hungary (56.7%) and Lithuania (78.1) or 18-21 in Romania (57.5%).

The analysis of the background shows a greater variation in Estonia where 23.5% of respondents come from a village, 56.5% from a town and 20.3% from a capital city. In the case of the other countries the respondents come on average about 32% from village or small seatelement and the difference from town. The presence of respondents from the capital city is very low in Hungary (2.1%) and Lithuania (1%) and absent in Romania.

The labour market presence of respondents is another aspect in which the Estonian case is different from the other countries included in the study. If in the case of Romania 81.3% of the respondents do not have a job, and the values are similar for Hungary (78%) or Lithuania (77.1), in the case of Estonia the percentage of those who do not have a job is half compared to the other countries with a value of 37.7%. Also in the case of Estonia the share of those who have a full or part-time job is significantly higher compared to the other countries.

In terms of being in education, only 18.8% of respondents in Lithuania and 17.4% in Estonia are no longer involved in education. The values for this category are significantly lower for Romania (3.5%) and Hungary (8.5%). The majority of respondents come from high school in Lithuania (76%) and Hungary (65.2) and from university in Estonia (81.2%) and Romania (69.4).

In other respects, over 96.5% of respondents in all four countries included in the survey declared themselves English speakers. German is spoken most often by respondents in Hungary (56%). Considerable percentages of German speakers are also found in Estonia (27.5%), Romania (19.5%) and Lithuania (14.6%). French and Spanish are spoken in Romania by 15.5% and 11% respectively. The percentage of speakers of these languages is significantly lower in Estonia, Hungary and Lithuania with an average of 4% for both French and Spanish. Italian is spoken by around 11% in Hungary and 7.8 in Romania, while Portuguese is not spoken in any of the countries included in our study.





Perceptions of the family standard of living reveal the presence of two patterns. On the one hand, about 66% of respondents in Hungary and Estonia consider the family standard of living poor or average and only 34% wealthy or rich. In the case of Romania and Lithuania 48.1% and 44.6% respectively consider the standard of living of the family poor or average, while the majority of respondents consider it wealthy or rich.

Analysis of time spent on online platforms shows that in Estonia and Hungary, 56.6% and 57.4% respectively spend between 1 and 3 hours per day. The percentages for the two countries are also similar for those spending between 4 and 6 hours (28%) or even more than 6 hours per day (6%). In the case of Romania and Lithuania we have a similar pattern of spending time on online platforms, but with considerably higher values. Between 1 and 3 hours a day are spent on online platforms by only 39.6% of respondents in Lithuania and 43% of respondents in Romania. The percentage of people spending between 3 and 6 hours a day is considerably higher, at 38.5% for Lithuania and 37.5 for Romania. The number of those spending more than 6 hours a day is also significantly higher for these two countries: Lithuania 16.7%, Romania 14.3%.

When it comes to benchmarking platforms, we note that: (1) Facebook is used daily by most respondents in Estonia (65.2%) and least in Romania (49.9); (2) Instagram is the preferred platform by most respondents, being used most frequently in Romania (80.8) and least in Estonia (62.3%) and Lithuania (54.2%); (3) YouTube is used considerably more frequently in Romania and Lithuania, but less frequently in Estonia and Hungary; (4) Snapchat has very high values of use in Lithuania, medium intensity in Hungary and Romania and significantly lower in Estonia; (5) Twitter reaches only in Estonia more than 10% of daily users and values around 5% for the same category in Hungary, Latvia and Romania; (6) TikTok is considerably less preferred in Estonia than in all other countries, with four times lower percentage of daily users in this country (14.9%) compared to Lithuania (64.6); (7) Linked-in is the channel used quite infrequently in all countries; (8) Even if it does not have a high daily frequency, Pinterest is rarely used by an average of 30% of respondents in each of the countries; (9) With the exception of Lithuania, where it seems to be rarely used by 18.8%, Twitch is a rather little used channel; (10) Telegram is also a very little used communication channel across all countries, with the lowest usage rate being noted in Hungary (1.4%); (11) With 82% of respondents using it daily, WhatsApp is by far the preferred communication channel in Romania. The same channel has average usage values in Estonia, where users of any type amount to 52.2%, and very low in Hungary and Lithuania, where total users do not exceed 20% of respondents.

Parents and experts are the most trusted categories. The level of trust for both categories is very high in all four countries (90%), with only a slight difference downwards for Lithuania, but without falling below the 80% trust threshold. A second tier of trust is given by teachers and friends. In the case of friends the perception is similar across all countries. In the case of teachers, Lithuania and even Romania the level of teacher trust is however slightly lower compared to Estonia and Hungary. The third echelon of trust capital is represented by NGOs and public institutions. NGOs show slightly lower trust in Lithuania compared to the other countries. In the case of public institutions, it can be observed that the level of trust in Romania is lower compared to the other countries. In the penultimate place in the level of trust are the media and directors of famous companies. In the case of executives they enjoy a higher level of trust in Hungary and Lithuania compared to Romania and Estonia where the level of trust is lower. The lowest trust ratings are for influencers and politicians. In this situation too, Lithuania stands out as a slight outlier as trust in these two categories is slightly higher compared to the other countries.

Recognized experts and parents are the categories of people that respondents trust the most when it comes to environmental issues. Experts enjoy the highest degree of trust in Hungary, and the lowest in Lithuania. Teachers are the second most trusted category. And in their case the highest trust is obtained in Hungary and the lowest in Lithuania. NGOs,





friends and public institutions continue to enjoy the trust of our respondents, although with more moderate values. It is worth noting that the Hungary-Lithuania binomial as extremes of appreciation levels is also present in the case of trust in NGOs. We also observe that public institutions enjoy the least trust in Estonia and Romania.

When it comes to tracking influences, we observe that this approach has moderate values in all countries, with the highest values in Hungary and the lowest in Estonia. Interestingly, although Hungary is the most frequently followed, it is also the country with the lowest desire to become a social influencer. In the same logic Hungary is followed by Romania and Estonia.

Good exemplary behaviour and charity are the most important attributes that determine the credibility of an influencer. Good exemplary behaviour is highest in Hungary, medium in Romania and Estonia and lowest in Lithuania. Charity is considered most important in Hungary and least important in Estonia. The second category of factors that is perceived as determining the credibility of an influencer is the high visual quality of content and the number of followers. The latter scores highest in Romania, while high visual quality of content scores highest in Estonia and Hungary. Long-term advertising partnerships is another criterion that ensures the credibility of an influencer, which is appreciated in most countries with relatively equal percentages.

The incidence of inferences in awareness of social issues is rarely considered by the majority of respondents in Estonia Lithuania and Romania. In the case of Hungary most respondents consider that awareness of social issues is effective. At the same time, we can observe that in Hungary Lithuania and Romania the type of influencers that our respondents follow are moderately well-known influencers (20 - 100 000 followers) and famous influencers (over 100 000 followers). In the case of Hungary Estonia there is also a considerable preference for influencers with a small fan base (5 - 20 000 followers). In terms of location of influencers, the majority of respondents state that they follow both local and international influencers. It is worth noting that the highest share of foreign influencers is in Romania.

Instagram, Tik Tok and YouTube are the channels where most influencers are followed. The values are without considerable differences between countries in the case of Instagram, but in the case of YouTube we can see that the incidence of influencers is lower in Estonia and Hungary and higher in Lithuania and Romania. Perhaps the most obvious difference in behaviour between countries can be seen in the case of Tik Tok users. It is used most frequently by respondents in Lithuania (80%) while in Estonia only 32% of respondents use it. In the case of all other channels, the incidence of influence is much lower and without notable values.

Dealing with interesting topics and producing quality content seem to be the main reasons why our respondents choose to follow different influencers. In Lithuania and Romania the importance given to these two factors seems to be higher than in Estonia and Hungary. Also another factor worth noting stands out in Lithuania and refers to entertaining content. Complementarily for respondents in Romania, the quality of the pictures seems to be a more important factor than for respondents in the other countries when referring to the reason why they choose to follow an influencer.

The reasons respondents refuse to follow an influencer seem to be the following: (1) gets boring for me. This explanation is the most common in all countries and does not show significant variation across countries. (2) not producing quality content. This argument is most frequently invoked in Romania and least in Lithuania. (3) no longer represents the cause/issue I started to follow. This argument also varies significantly from country to country, being most frequently invoked in Estonia and least frequently in Lithuania. (4) posting too many ads is another important argument in the decision to stop following. In





Estonia this argument is the most frequently used compared to the other countries, and at the opposite pole for the same reason is Lithuania.

Plants and animals have as much right as humans to exist and Humans are seriously abusing the environment are the statements with which our respondents most strongly agree. The level of agreement is similar in Estonia, Hungary and Romania, the only country where the level of agreement is slightly lower is Lithuania. At the opposite pole, the statements with which our respondents show the lowest degree of agreement are Humans were meant to rule over the rest of nature and Humans have the right to modify the natural environment to suit their needs. Also in the case of these statements we can see that the Lithuanian responses differ from those of the other countries, in this case the level of disagreement is the lowest.

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We are approaching the limit of the number of people the Earth can support is one of the statements that varies considerably from country to country. Estonia shows the highest level of agreement with this statement. At the opposite pole are respondents from Romania. And in the case of the statement The Earth has plenty of natural resources if we just learn how to develop them between Estonia and Romania we have the largest deviation, in this case the Romanian respondents having the highest degree of agreement. In Romania we also observe a slight level of hope that your attitude and actions change the current environmental/natural problem.

When the effectiveness of the methods in tackling environmental problems is analysed, we can observe a high level of agreement of the respondents with all the proposed options. In terms of differences between countries, we observe that for this set of questions, Lithuania has the highest level of disagreement.

Recycling, nature protection, energy saving, climate protection, waste management are the statements with which most of our respondents agree. This level of agreement is almost the same as in Hungary, Estonia and Romania. Lithuania again makes a slightly discordant note by presenting the lowest values of agreement with these statements, but also in the case of the no packaging or reducing food waste proposals. In contrast, the statement with the lowest level of agreement among our respondents is the downside of green initiatives.

In terms of the behaviour of our respondents, we observe that about two thirds of respondents follow influencers who post on environmental topics and there is no variation from country to country. At the same time less than half of them share news related to environmental topics. The share of those who do not share is considerably higher in Lithuania.

