

# **RE-EURECA-PRO**

The Research and Innovation Dimension of the European University on Responsible Consumption and Production

Participants:	Montanuniversität Leoben, Mittweida University of Applied	
	Sciences, Technische Universität Bergakademie Freiberg,	
	University of León, University of Petrosani, Silesian University of	
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## 1. Introduction

Although Science Communication as a distinct research field emerged only about 60 years ago (Gascoigne et al., 2010), efforts to communicate scientific knowledge reach back much further. In a recently published edited volume, editors Muñoz Morcillo and Robertson-von Trotha (2020) put forward their thesis of (European) "popular science [being] a recurrent cultural technique" (p. 13). According to this view, efforts to communicate science "with a concrete purpose" (Muñoz Morcillo, 2020, p. 28) are by no means recent phenomena, as research on the genealogy of popular science suggests: Instead of placing the beginnings of what is now more narrowly termed 'science communication' within the era of modern science, Muñoz Morcillo supports a genealogical approach that is understood in a broader, more general sense as 'science popularization' and, by this, traces the roots of knowledge dissemination between scholars and the public as far back as Greek antiquity. By using a Foucauldian approach (Foucault, 1977), the contributing authors propose a genealogical delineation of different ancient forms of science popularization resembling many of the formats in which institutionalized science communication is practiced at tertiary educational institutions today.

Before returning to what can be learned from historical examples of science communication today, a problematization of some of the main terms and concepts used within the field must be made. Acknowledging the historicity—and therefore context-dependency—of terms such as popular science, science popularization and science communication, it is thus necessary to examine them, particularly with regard to their discursive power.

The existence of the term 'popular science' suggests a distinction from a 'science proper' (Topham, 2016, p. 1)—a view that seems to be implicitly held by many scholars. As Bucchi (1996, p. 376) aptly puts it: "According to such views, in fact, the public discourse of science begins where scientific discourse ends".<sup>1</sup> This is also reflected in what is widely regarded as internal (as distinct from external) science communication; the typological difference stemming from who is addressed in the act of communicating. Internal science communication is here regarded as taking place within the scientific realm itself, i.e., between

<sup>&</sup>lt;sup>1</sup> For a thorough critique of this distinction, see Secord (2004) and Topham (2016).



members of the scientific community, and is considered to be a fundamental part of the scientific research process itself. Typical examples of internal science communication are verbal exchanges about the research process and its results within research groups or at scientific conferences as well as written exchanges in the form of publications thereof. External science communication is thus aimed at recipients beyond the scientific community (Leßmöllmann & Gloning, 2020).

While an implicit bias towards internal science communication as 'science proper' is visible in many academic communities, the importance of external science communication cannot be overstated. Science has always had a considerable impact on everyday life and everyday communities. The rise of digital technologies and the repercussions of climate change or the CoVid19 pandemic, to name just three examples, have forcefully demonstrated how important the preparation of complex content and its comprehensible communication to different groups outside the university cosmos are. The gap between universities and society can thus be bridged and a contribution made to strengthening the everyday relevance of science and the resilience of the population with regard to increasing polarization and dealing with misinformation, disinformation and what is colloquially called fake news. This also includes the provisional nature of scientific knowledge and its entanglement in political and economic discourse.

This work package 2, which deals with science communication and citizen engagement, is part of the research and innovation subproject of the European University on Sustainable Consumption and Production (RE-EURECA-PRO). The scientific concepts and findings on responsible consumption and production, as well as on sustainability and the SDGs 4 and 12, developed within the framework of EURECA-PRO (consisting initially of seven universities in six European countries) necessitated the utilization of science communication formats that are both appropriate for the content and effectively address the different audiences at the different campuses and online.

In the first phase (M1 to M6), a strategy concept was developed. This concept was analyzed in the second phase (M7 to M36), while several formats were implemented and supplemented with the knowledge gained during the project's duration. This guidebook is the end result.



## 2. Objectives

The aim of these guidelines is to support partner universities and other stakeholders in the implementation of science communication formats to make scientific content more accessible and engaging to broader audiences. To this end, possible approaches for the Science Slam, Project Weeks and Pupils' and Citizens' University formats are identified and specific guidance is provided to effectively address the complexities of disseminating scientific knowledge. In doing so, it is important to consider the resources and objectives of the respective universities as well as the interests and needs of the target groups on site. This dual focus acknowledges the importance of a bi-directional flow of information and the value of aligning academic outputs with societal needs and interests. Findings in this regard were collected and compared during the creation of the strategy concept on the part of the universities and subsequently from the feedback of the participants involved in the respective formats, including pupils, students, citizens, and university members. This diverse group reflects a broad spectrum of stakeholders who have varying degrees of interaction with scientific content and institutions. Addressing the expectations and interests of these target groups is essential. This includes creating incentives for young scientists to engage in science communication, thereby fostering a culture of dialogue and mutual understanding. By promoting guided exchanges of perspectives, the Guidebook aims to develop a knowledgebased culture of dialogue between universities and the broader community. The guidelines drafted are intended to make the specified science communication formats feasible and adaptable to different framework conditions and to not only make scientific knowledge more accessible, but also foster a collaborative and informed relationship between universities and society at large.

## 3. Formats and Practice Examples

Within the framework of RE-EURECA-PRO two formats were planned and piloted at all partner universities: a Project Week and Pupils' or Citizens' Universities. Science Slams were organized at Mittweida University of Applied Sciences (HSMW) and Montanuniversität Leoben (MUL). During the initial mapping phase of the project, these formats were also identified as already-



established practical examples at several partner universities. The formats are briefly described below.

#### 3.1 Science Slam

The "Science Slam" format can be understood as a modified form of poetry slam. The latter arose from the motivation to provide a platform for unconventional writers (Eisenbarth & Weißkopf, 2012, p. 155). Science Slams, in this context, developed into a competition format that young scientists in particular but not exclusively, use to explain their specialist topics. The aim here is to present one's own research in a short period of 5 to 10 minutes in the most entertaining way possible and thus win the favor of the audience. Depending on the event, tools such as presentations can also be used (Niemann et al., 2020, p. 2). This format facilitates exchange not only between scientists and within the scientific community, but also with non-specialist audiences, thereby offering insights into research in a way that allows versatile and interactive engagement with scientific content.

## **3.2 Project Week**

Project Weeks are meant to enable a more intensive exchange between students and scientists on a specific topic. Usually, the focus is on a central question or topic which is addressed throughout the week. This form of science communication promotes scientific approaches to complex topics and may motivate the participants to inform themselves about scientific matters. The participants also gain insights into the work and the future of their profession in a scientific context.

It is worth noting that in this special format of Project Weeks for students, an overlap between science communication and science education can be observed. In this case, new learning environments outside of the school context are created through intensive, often topic-related project work (Winter, 2012, pp. 30–31). The format offers the potential to be adapted to a variety of framework factors. In accordance with the specifications in the Grant Agreement, the event is to be held with as few barriers as possible. This includes the appropriate preparation of scientific content and the adjustment to local conditions such as language, school vacations, public vacations as well as the interests, abilities and demands of the school or participants.



The participants should get insights into scientific processes and research. Furthermore, the event should serve the dissemination and communication of the contents of RE-EURECA-PRO.

## 3.3 Pupils' University/ Citizens' University

The concept of Pupils' Universities, which was first introduced at universities in Tübingen and Innsbruck in the early 2000s, focuses primarily on playful elements and child-friendly language (Seifert, 2012, pp. 177–178). The implementation of Pupils' Universities is significantly influenced by the specific conditions of the universities and the focus of the institutions involved. Nevertheless, according to Seifert (Seifert, 2012), the format can be categorized into different types regarding the practical aspects. The formats mentioned include mass lectures, a model that was adopted by many institutions in their initial phase of format implementation. Workshops enable an interactive design of the format by means of experiments, group work and the active involvement of the participants. Summer schools offer a complex program lasting several days, often during school holidays, following the example of the children's university in Vienna (Seifert, 2012, p. 179).

This document also examines the concept of Citizens' Universities which can be understood as both a format for citizen science as well as a format within the framework of science communication. Citizens' Universities can be implemented in various forms, including lectures, which are typically conducted within an academic framework in the form of public lecture series by speakers from various specialist areas, or dialog formats with experts from a wide range of fields who discuss and provide insights on a specific overarching topic (Humm et al., 2021, p. 1). This illustrates that civic universities are variable in their design. Such events may be offered in person or online at any time. Furthermore, the level of interactivity and the possibility of opening a public dialogue can be adjusted. This allows for the targeting of different groups and the focusing of resources on the specific needs of these groups and institutions. If citizens are directly involved in the research process or provide assistance to researchers, this can be called Citizen Science (Bonfadelli, 2017, p. 99).



## 4. Analysis of the Implementation of Formats

In order to create a guidebook that would be as helpful and effective as possible for all partner universities in the consortium, it was necessary to determine both their needs and resources. This was done not only through a general survey, but also by analyzing the implementation of two Science Slams held at HSMW and MUL, as well as the "Project Week" and "Pupils' University" formats, which were carried out at every campus of the alliance. All events were implemented first at Mittweida University of Applied Sciences and subsequently at the partner universities with guidance and support from the HSMW.

It is essential to consider the limitations associated with the insights gained in this context. The assistance provided is among other factors influenced by the evaluation of events at the partner universities. It should be noted that the results presented here are not representative in the sense of being applicable to a wider context. Rather, they are the result of the specific context of RE-EURECA-PRO and therefore cannot be regarded as generally valid. Furthermore, the feedback and the results drawn from it are subject to various factors that are individual to each partner university. These include the framework of the surveys, the language, and any modifications resulting from translations of the given questionnaires into the national languages, as well as the timing of the surveys.

## 4.1 Reporting: RE-EURECA-PRO Partner universities

As part of this document, comprehensive summaries of both the Project Weeks (MS3) and the Pupils'/ Citizens' Universities (MS4) at each alliance's campus were created adhering to a uniform set of criteria, which are included in the annex (see Annex, p.22).

The Project Week (MS3) and Pupils'/Citizens' university formats (MS4) were implemented at all partner universities between July 2023 and March 2024. In addition, a Science Slam (MS2) was held at the HSMW on January 23, 2023, and at the MUL on March 29, 2023. Both Science Slams were aimed at the general public, as well as academic staff and students. The events were streamed live on YouTube and Twitch, allowing viewers to submit questions via the chat



function<sup>2</sup>. The event in Mittweida took place off campus and featured a live music band, which was effective in bringing in local and regional audiences, while the Science Slam in Leoben was carried out at the university and was moderated by a popular radio presenter from a regional radio station. Both Science Slams were successful and reached a large audience, from students to professors and members of the public.

In advance of the Project Week (MS3) and Pupils' /Citizens' University formats (MS4), the HSMW team provided guidance to the partner universities. This included the development of guidelines and presentations, bilateral talks on the realization of the individual events, as well as the dissemination of emails containing further information and documents. The partners were also requested to evaluate their events. To this end, format-specific questionnaires were created, which the partners were able to adapt to their specific target groups and circumstances. This includes translating the materials into the local language on the one hand, as well as formulating the materials in a language that is understandable to the target audience.

A total of 943 students participated in all the partner universities' project weeks and gained a broad insight into the topics of sustainability and responsible consumption relevant to EURECA-PRO and RE-EURECA-PRO. In addition, the participants got to know the universities in their region and had the opportunity to interact and try things out on campus. The formats of the project weeks varied from intensive project work over several days with fixed groups to changing groups in the context of a theme week.

As part of Milestone 4, the partners were given the option to implement either Pupils' Universities or Citizens' Universities. All partners chose to implement Pupils' Universities, which was a natural choice, since all universities focus primarily on attracting future students. In total, the events reached a collective audience of 1,589 pupils across the alliance. The majority of events diverged from the conventional lecture format and were realized as interactive workshops conducted in smaller groups. Some partners utilized established

<sup>&</sup>lt;sup>2</sup> The streams collectively received over 1,600 views afterwards and in addition to the on-site and the livestream audience. HSMW-Stream: <u>https://www.youtube.com/watch?v=hBVNmCQsP1k</u>; After Movie: <u>https://youtu.be/a89JbaEle-4?si=vQkKmTWitahNWo0t</u>; MUL-Stream: https://www.youtube.com/watch?v=Rjk9TixZs60



formats to adequately convey the contents of EURECA-PRO to children, while others seized the opportunity to test new variations such as changes of location. Additionally, individual partners conducted multiple workshops with different groups over a longer period as part of the Pupils' University. According to the specific objectives of the partners, the events were aimed at children and school students between the ages of 4 and 5 years old and 12 and 13 years old.

## 4.2 Results and Insights

Science Slams:

Two pilot Science Slams were carried out at HSMW and the MUL. During the implementation of the event at HSMW, it became evident that a strategy that is as adaptable as possible at the individual level is necessary in order to be able to successfully tailor the events to the target groups defined by the respective universities. In particular, relevant factors such as language, but also spatial aspects, can be adjusted with greater ease and in a more effective manner.

In the case of the Science Slam in Mittweida, while focusing on the local audience using adequate and understandable language worked more effectively for the event. In addition, with the Werkbank32, a newly created venue was opened up to the city's population, reaching an interested audience and enhancing engagement with local citizens. While the Science Slam at MUL took place at the university and was moderated by a popular radio presenter, Thomas Axmann, from the local radio station "Antenne Steiermark" and reached a large and diverse audience. In the case of both Science Slams voting tools like "Mentimeter" have proven successful in terms of motivating the audience to actively engage in the event.

It should be noted that organizing a Science Slam can be very costly. As it is usually an evening event where the entertainment factor plays an important role, the supporting program is considered accordingly and is more expensive. In the case of Mittweida, this included a live band, snacks for the audience, room rental and streaming costs (for an external audience). In case of MUL, that was a cost of honorary fee for the radio presenter, snacks and drinks for audience and award for the winner (Klimaticket – yearly train ticket).



Project Weeks and Pupils' University:

Regarding the Project Week and the Pupils' University formats, most results and insights were gathered from the feedback the partners collected in the process of evaluating their individual events. Based on the feedback from MUL and Technical University of Crete (TUC), it is important to ensure that the design of science communication formats is tailored to the target group, which should be based on the complexity and time span of the work tasks and the duration of the project week. Ideally, the scenarios designed should therefore be tested in advance for their feasibility. The participants of all project weeks expressed particularly positive feedback on interactive content, which they actively integrated into the program. The opportunity to gain firsthand insight into the universities and the close and low-threshold exchanges with scientists were also rated positively.

The implementation of the formats can basically be seen as a "playground" that also offers the opportunity to test new approaches through customizable design options. This includes, for example, changing the location and group sizes as well as trying out new formats, target groups and evaluation methods. The implemented formats acted as an initial impulse, with HSMW designing one project week as a "SpeedBachelor", which offered students the opportunity to get to know a bachelor's-degree-level program in fast-forward mode. The content presented was supplemented by campus tours, interactive tasks and eating together in the cafeteria. Following the event, the participants requested the repetition of the "SpeedBachelor" format (Project Week).

Similar results were obtained from the analysis of feedback on the Pupils' University. Here, too, interactive content was particularly appreciated. As with the Project Weeks, partners were able to adapt the formats to specific factors arising from their respective objectives and prerequisites.

At HSMW, where the "Kinderuni" (Children's University) is an established format, the event was conducted in a municipal park ("Am Schwanenteich"). To improve feasibility, the group size was reduced, allowing for more practical and interactive experiments to be carried out with the group and the instructor. Following this successful implementation, further children's university events planned for 2024 took place outside the university context (Wilhelm-Ostwald-Park, Experimentieren im Park).



Technical University of Crete (TUC) linked the project week with the Pupils' University by having the students who participated in the Project Week take over the role of mentors and teach the participants of the Pupils' University.

The positive feedback following the Pupils' University at University of Petrosani (UP) and strong demand for science communication formats led to the implementation of a GreenWeek. This included additional programs for local students, addressing a previously unrecognized or unanalyzed need.

Further conclusions were drawn regarding the supervision and guidance of partners through HSMW as the lead of work package 2 (Citizen Engagement and Societal Knowledge), which were incorporated in the development of guidelines. The most effective approach was a combination of providing informational materials and facilitating low-threshold, bilateral exchanges.

In general, preferable formats are more interactive, project-oriented, and organized as event series with fewer participants, featuring less traditional lecture-style instruction and more participatory activities.

Two variants of Project Weeks were piloted: one in which a fixed group was established, and another in which individual project days were scheduled with changing groups. The latter approach, which involved varying the target groups, was optional and dependent on the university's preferences. While the fixed group variant allowed the project to progress with continuous work on a topic and intensive discussion, the individual project days with changing groups and varying target groups enabled a broader exploration of the topic. However, this approach may require adjustments depending on the group. The choice of format was left to the universities. The guidebook thus comprises three guidelines, one for each format (Science Slam, Project Week, Pupils' or Citizens' University), which have been adapted in various ways.

Given the transnational and interdisciplinary nature of EURECA-PRO and RE-EURECA-PRO, there is no universal strategy that can be applied to all formats collectively or to individual formats. Instead, the strategy and approach must be tailored to the specific content being communicated and to the context of the higher education institutions/universities and target groups, taking the thematic priorities into account. This can be observed, among other things, in the different organizational structures of the specified event formats.



## 5. Overall Strategy & Guidelines

The subject of this deliverable is constituted of the aforementioned findings, our theoretical understanding of science communication and the translation of these two into a strategy. We use the word strategy cautiously here, as the findings above and our experience in other projects and realms has shown that the development of a standardized and universally valid strategy for all members of a European consortium cannot be regarded as advisable.

Rather, each partner must create their own concept for successful science communication that takes into account the following points:

- 1) Each university has to critically assess its own location and embeddedness in the local and regional culture and society. Issues to be taken into consideration are:
- Geographical and mental distance from the campus to appropriate public spaces, where communities meet and discuss
- Relationship to other civil society actors and the local and regional business community
- Relationship to schools and other institutions of (higher) learning
- Specialization of the university in regard to disciplines and subjects
- Institutional support and awareness that successful science communication is an instrument for profile building
- Size, special interests and English language proficiency of the catchment area of the university
- Distance to other regional cultural centers and science communication formats on offer there
- Pre-existing Citizen Science projects

The analysis of these points then impacts the spaces, where formats of science communication should take place, which partners should be involved, which language should be used, which specific formats are to be developed, and which topics could be addressed.

 Additionally, the following factors and conditions of success for individual formats, events or campaigns need to be considered:



- Clearly defined aims
- Clearly defined target group(s)
- Impulses from civil society (public discourse as well as general interests, demands)
- Documentation and constructive evaluation
- Access to media support and media partners, possibility of streaming events online

With these factors in mind, individual events and campaigns can be planned and implemented. The partner in charge of science communication efforts in the consortium, in our case HSMW, can provide assistance.

As the planning of these formats is a complex process, target conflicts can occur. An example can clarify what we mean by target conflicts. The preferred language in the university alliance EURECA-PRO is English. However, at several universities within the alliance the English skills of the general public are not sufficient to follow and get involved in a panel discussion. Simultaneous translations are expensive and cannot be provided for every event. In this case, partners can decide to switch to the native language of their country in order to increase active participation of the citizens in the community.

Nevertheless, there are, of course, overarching topical aspects in a European University Alliance that reflect a transnational strategy. These include the general thematic priority, and, in the case of RE-EURECA-PRO and EURECA-PRO, content from the areas of sustainability, responsible consumption and production (the sustainable development goals 12, but also 4), which are given precedence in communication.

The guidebook and the assistance included, are divided into format-specific sections, so that a recommended procedure is available for each of the tested formats. As an example, the guidelines for the project week, which were provided to the partner universities as a handout prior to implementation, have proven to be helpful.





## 5.1 Science Slam

Framework:

- **Topics**: What content should be communicated? Are there thematic focuses?
- Date:
  - o Set a date and subsequently create a schedule for the organizational process
  - Start organizing as early as possible
    - ! The more extensively the event is planned, the earlier the basic framework points should be determined
- Target Group: can be divided into two groups
  - Speakers: mostly young academics, i.e. students, researchers
    - ! Briefings of the individual speakers may be required
  - o Audience: young academics, university staff, interested citizens
- Dissemination:
  - Determine suitable dissemination channels (align with the preferences of the target group)
  - Best suited are: posters (on campus & in the surrounding region), emails to (internal and/or external) professors, secretariats, mentors and student services, social media posts and posts on the university pages
- KPI's: Are there elementary goals that should be achieved with this event?
  - o e.g. Number of visitors/views
    - ! KPI's may be helpful regarding quantitative evaluation



## Implementation:



Local (narrow target group	International (event should reach		
consisting of citizens, university	as many people as possible,		
staff, students)	diverse target groups)		
<ul><li>Popular public space</li><li>University</li></ul>	<ul> <li>Popular public space</li> <li>University</li> <li>Live stream (Video on Demand)</li> </ul>		
<ul> <li>Local language, (English in addition if needed)</li> <li>Appropriate language that fits the overall framework setting</li> </ul>	<ul> <li>English (local language in addition)</li> </ul>		
• Live music or comparable acts i	Live music or comparable acts in between the event and during		
the voting process			
• User-friendly voting tools (e.g.	. Mentimeter, Kahoot.it)		
<ul> <li>Create a relaxed atmosphere that breaks down barriers</li> <li>Provide snacks</li> <li>Event should be accompanied by a host who embraces general setting and involves the audience</li> </ul>	<ul> <li>Actively involve participants via digital tools</li> <li>Use chat functions to include questions from stream participants</li> </ul>		
	<ul> <li>consisting of citizens, university staff, students)</li> <li>Popular public space</li> <li>University</li> <li>Local language, (English in addition if needed)</li> <li>Appropriate language that fits the overall framework setting</li> <li>Live music or comparable acts in the voting process</li> <li>User-friendly voting tools (e. g</li> <li>Create a relaxed atmosphere that breaks down barriers</li> <li>Provide snacks</li> <li>Event should be accompanied by a host who embraces general setting and involves</li> </ul>		



## **5.2 Project Week**



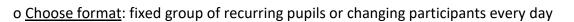
### Framework:

- **Topic**: Which topic(s) is/ are to be communicated? Is there a certain purpose that is to be addressed by carrying out this format? (e. g. raising interest in science, recruitment of future students)
- Date: Set a time period in which the event takes place
  - Determine the time span of the project week
    - ! Depending on possible cooperations, target groups as well as organizational flexibility
- **Target Group**: Figure out target group and format, as well as purpose of project week (e. g. raising interest in science, recruitment of future students)
  - Figure out whether a fixed group of participants or a changing group of participants is more suitable
  - Establish cooperation with schools to carry out project weeks or use existing collaborations/ partnerships with schools
  - Age of the participants:
    - Pupils in higher grades are better suited for the project due to the complex context of the topics as well as the relevance, as school graduation is approaching
- Dissemination:
  - The advertising of the event should be adapted to the target group and variant of the format
  - Plan a long-term application phase when opening the event to the public and use adequate channels
  - In cases of direct cooperation with schools or similar institutions, focus more strongly on bilateral meetings or project presentations
    - ! For existing collaborations, an application for additional participants may be unnecessary



- ! Recommendation: create reports after the event to use them as references for future events
- KPI's: Are there elementary goals that should be achieved with this event?
  - ! KPI's may be helpful regarding quantitative evaluation

## Implementation



### Keep capabilities (staff, locations, institutions) of university in mind

- Number of staff available
- Available locations (such as laboratories, lecture rooms, etc.)
- Capabilities of the school as partner as well as the partners interests

Variants of participation	One "fixed" group for the whole week (due to cooperations with external partners)Changing participants every day
Format	<ul> <li>A format which evolves throughout the week</li> <li>Example: "SpeedBachelor" at HSMW</li> <li>A format which is suited to be carried out in one day and repeated for several days</li> </ul>
Framework program/ Incentives (optional)	<ul> <li>Activities designed as progression and connected to each other</li> <li>Content can be provided in more detail &amp; adapted to target group</li> <li>Incentive: Hand out "diplomas" at the end of the project period</li> <li>Activities need to be suited for one day</li> <li>Content must be provided in a compressed form, offering a general overview on a specific subject</li> </ul>



## 5.3 Pupils' University/ Citizens' University

#### Framework:

- Topic: Find a suitable topic.
- Date: Set a date for the event
  - ! Ensure adequate preparation time
- Target Group:
  - Pupils' University: children (preferably 8 12 years)
    - ! Age of participants may also be lower or higher  $\rightarrow$  content must be adapted
    - ! Age span should not be too broad in order to address everyone accordingly
  - Citizens' University: open to everyone (academic, non-academic, citizens, interested people)
- Dissemination: adjust to respective target group
  - Newsletters to inform potential audience about program, events and start of registration periods
  - o Posters and folder
    - ! Displayed at highly frequented locations in the city; regarding pupils' university: dissemination at kindergartens, pre-school classes and elementary schools
  - Face-to-face approach at the end of the previous event (either pupils' university or citizen events)
- KPI's: Are there elementary goals that should be achieved with this event?
  - ! KPI's may be helpful regarding quantitative evaluation





## Implementation:



! Depending on the respective target group the format must be adapted

Target Group	Children (8 - 12 years)	Citizens, non-academic audience,		
		interested people		
Format	Lecture (45 to 60 minutes); Tim	Lecture (45 to 60 minutes); Time for questions afterwards		
Framework	Add interactive components (e	Add interactive components (experiments or special tasks for all/		
program/	selected group of participants)	selected group of participants)		
Incentives	• Keep barriers as low as possible. The audience should be			
(optional)	addressed in understandable, l	addressed in understandable, but appropriate language		
	Spatial aspects as possible ince	Spatial aspects as possible incentive: open up new or usually		
	inaccessible places, locations a	inaccessible places, locations apart from university campus		
	• Use incentives (e.g. student	• Find a link between scientific		
	ID-cards, stamp cards,	topics and the everyday life		
	diplomas, rewards that	of audience to address		
	participants receive after the	relevance		
	event)	Invite interesting, popular		
	Provide additional	speakers		
	information / program for			
	parents			



## 6. Annex

In addition to the guidebook and for a better understanding of the results of implementing the formats at the individual partner universities, summarized overviews are attached here. These contain information on the implementation periods, target groups, format design, framework program and feedback from the target groups and supervisors.

Furthermore, initial briefings, such as guidelines which were used in the run-up to the implementation of the Project Weeks, as well as the information presentation on the Pupils'/ Citizens' university format, will be provided in the following section.

## a. Summary Implementation MS3 Project Week

The following section summarizes the implementation of the Project Weeks (MS3) at the respective partner universities of the consortium. The summary was prepared with the help of the materials provided by the partner universities. Key categories such as target group, time period, type of implementation and framework program as well as the content conveyed are discussed. In addition, when recorded by the partner universities, special features and insights are included as well as informational material such as links to reports.

## Mittweida University of Applied Sciences (HSMW; WP2 Lead)

Time Frame of implementation: from July 3rd to 6th, 2023

Target Group: 31 pupils from grades 9 to 11 (ages 15 to 17)

## Content/Framework:

The framework of the project week was designed as a quick run-through of a course of study, which illustrates both the various teaching and learning formats as well as important locations and aspects of student life. For the purpose of target-group oriented and comprehensive communication and dissemination of the event, the project week was named as "SpeedBachelor". The event was implemented in cooperation with "Städtisches Gymnasium Mittweida". To ensure a consistent group of participants, the format was offered during the



schools' project week where pupils could choose a topic to focus on. In total, 31 pupils participated.

Project Week started on Monday with a short matriculation ceremony and a study counseling session explaining the different types of schools and study programs, followed by the first lecture and a seminar which were rounded off by a campus tour. The following days included various lectures on the behavior of bees, global communication, sustainable real estate management and physics as well as a guided tour through the laser institute. Finally, the week concluded with a round of reflection and the presentation of certificates: The "SpeedBachelor"-diploma.

### Links and References/ Press/ Dissemination:

https://www.hs-mittweida.de/news/aktuell/7935/?gl=1\*1er18av\*gcl\_au\*MjExNDMyOT MxMS4xNzE0NjUyNjI0&ga=2.165700862.1949845321.1716966375-1720346471.1714652 624

https://www.eurecapro.eu/project-week-at-hsmw-2023/

<u>Overall Feedback:</u> Participants were satisfied with the format and the general content provided. Several school representatives (e.g., teachers) as well as students asked for a repetition of the format.

#### Very good:

- The overall concept/ format itself (fast-track study program)
- Mentoring by the university staff
- Low-threshold exchanges with mentors and professors
- Variety of topics

#### Requests for improvement:

- Smaller groups
- More project days
- More interactive activities (e.g., experiments)
- Comprehensibility and demands of individual topics could be better adapted to the target group



## Montanuniversität Leoben (MUL)

<u>Time Frame of Implementation</u>: from September 4<sup>th</sup> to 9<sup>th</sup>, 2023 (within the framework of a Holiday Camp "FutureDays 2023")

Target Group: School students (16+)

### Content/Framework:

The students worked together on a challenge (how to design an energy efficient home) and competed against each other in groups. Campus tours, lectures, workshops, lab visits, and social events were included in the program.

### **Overall Feedback:**

The participants rated the entertainment factor with the highest score and stated that they had gained new perspectives on the subject area throughout the project week. Most participants would also like to participate in more project days and would like to do more practical application exercises.

Very good:

- Time shared together
- Diversified program
- Mentoring

Requests for improvement:

• Optimize content even better to suit the target group (content was often too complex)

<u>Links and References/ Press/ Dissemination:</u> <u>https://www.unileoben.ac.at/futuredays/bilder-2023/</u> https://www.eurecapro.eu/project-week-futuredays/



## Silesian University of Technology (SUT)

Time frame of Implementation: from May 29<sup>th</sup> to June 2<sup>nd</sup>, 2023

Target Group: Different target group each day; total number of participants: 208

20 kindergarten children, 90 primary school pupils, 98 high school students

### Content/Framework:

Day 1&2: pupils from primary schools;

- Workshops and lab tours organized on SUT campus in the Centre for New Technologies-building
- Green energy sources; carbon footprint and the risks it poses to nature; visible and invisible water pollutants; analysis of climate records imprinted in trees; risks of microplastics use

Day 3&4: high school students

- Connect with scientists from EURECA-PRO universities as part of STEM Colloquium: 31.05.2023 Dr. Inga Maria Eichentopf (HSMW): Human impact on climate; climate change; how to create climate and climate-change models; the most vulnerable elements of the earth's climate
- 01.06.2023 Ph.D. Eng Alexandra Stanimirescu SOICA (UP): The three R's of sustainability: reduce, reuse, recycle; How to reduce resource consumption using each of the R's, provided examples of successful use of this approach

Final Day:

 Held at "Kropka" toddler club on SUT campus; art workshops led by researchers and students from SUT, main motto of the event in line with the project's vision: "We learn how to realize ideas and visions together - whether we are young or old, academics or workers, children, pupils or students."

## Links and References/ Press/ Dissemination:

https://www.polsl.pl/eureca-pro/ps\_aktualnosci/pierwsze-spotkanie-project-week-reeureca-pro/

https://www.polsl.pl/eureca-pro/ps\_aktualnosci/drugie-spotkanie-project-week-eurecapro/



https://www.polsl.pl/eureca-pro/ps\_aktualnosci/project-week-re-eureca-pro-wakademicki-liceum-ogolnoksztalcacym/ https://www.polsl.pl/eureca-pro/ps\_aktualnosci/project-week-eureca-pro-w-klubiemalucha-kropka/

<u>Overall Feedback</u>: Unfortunately, organizers were quite reluctant to gather any feedback from participants due to data protection concerns.

## Technische Universität Bergakademie Freiberg (TUBAF)

<u>Time frame of Implementation</u>: in six cases: one single day (2022: September 12<sup>th</sup>; 2023: January 23<sup>rd</sup>, April 26<sup>th</sup>, June 14<sup>th</sup>, June 19<sup>th</sup>, June 20<sup>th</sup>) and further six days were integrated into a full week program at TUBAF with the title "Journey into research" (2023: June 27<sup>th</sup>, June 30<sup>th</sup>, July 3<sup>rd</sup> to 5<sup>th</sup>, July 26<sup>th</sup>)

Target Group: School students 15 - 18 years

## Content/Framework:

In total 247 students and their teachers participated in the Project Days "Journey Into Research" and gained insights into the following aspects:

- Sustainable consumption and production within RE-EURECA-PRO
- How the world exists, develops, and changes through our human needs and abilities; our own resource footprint; distributional fairness and a journey into the world of resources
- Different labs, e.g., on additive manufacturing; glass as a material or the digital mining lab where first practicals are trained

## Links and References/ Press/ Dissemination:

https://www.linkedin.com/posts/eureca-pro\_eurecapro-sdg12-responsibleproductionactivity-7089509395562209281-KXpP?utm\_source=share&utm\_medium=member\_desktop

<u>Overall Feedback:</u> Unfortunately, organizers were not able to gather any feedback from participants due to data protection concerns.



## **Technical University of Crete (TUC)**

Time Frame of Implementation: from October 11<sup>th</sup> to 13<sup>th</sup>, 2023

Target Group: University students

#### Content/Framework:

In total 35 students participated of whom 49% female and 51% male.

Day 1:

- Presentation of the two general topics to all participating students
- "Sustainable Tourism and Protection of NATURA 2000 Areas", presented by Prof. Theocharis Tsoutsos, Director, Renewable and Sustainable Energy Lab, TUC School of Chemical & Environmental Engineering
- "Recycling and Schools", presented by Ms Marianthi Liapi, TUC TIE Lab, TUC School of Architecture, and supervised by Prof. Konstantinos-Alketas Oungrinis, TUC TIE Lab Founder and Director, Vice Rector of Research and Innovation at TUC

Day 2:

 Forming groups of students and elaborating on ideas and sustainable solutions on one (or both) of the topics that were presented on Day #1. Contribution of mentors by consulting with the student groups about their work

Day 3:

• Presentations by the students of their ideas and proposed sustainable solutions

## Links and References/ Press/ Dissemination:

https://www.eurecapro.eu/project-week-at-tuc/

<u>Overall Feedback:</u> Overall, based on the participants' comments, the TUC Project Week was a pleasant and useful experience for the students, who would welcome more time (one additional day, possibly) to elaborate further on their ideas and pitches. In addition, the students would participate again and would like to see a repetition or more formats of this kind.



Very good:

• Intensive exchanges with experts, soft skills training, group work

## Requests for improvements:

- More time to adapt work/project tasks to the duration of the Project Week
- Better communication of tasks
- Intensified dissemination

## Universidad de León (ULE)

<u>Time Frame of Implementation</u>: from February 28<sup>th</sup> to March 2<sup>nd</sup>, 2023; schedule was from 9:00 to 20:00, with a break from 14:00 to 17:00. In the morning, the groups were organized to attend a lecture of 50 minutes on one specific date. In the evening, the event was open to the public.

<u>Target Group</u>: Elementary school and high school students (9 to 17 years); 295 students divided into 9 groups for three days

## Content/Framework:

- Three-day event on scientific dissemination
- 50 minutes of activities with each group
- Introduction to the RE-EURECA-PRO project and EURECA-PRO; the mission of the university in society; European values and culture; SDG 12 & 4, as well as environmental awareness
- Activities varied according to the age of the participants
  - Students were divided into four smaller groups.
  - The initial activity centered around the use of 'Connector'; an educational game designed for connecting questions with their corresponding answers. The game involves perforated sheets, where students employ a pair of electrodes. The light activates when one electrode aligns with a question and the other with the correct answer.
  - Other games addressing different age groups: calculation of one's individual ecological footprint, biodiversity board game, matching EU flags and landmarks as well as opportunities for small children to do handicrafts.



Links and References/ Press/ Dissemination: https://www.instagram.com/reel/CpPnUjZox1T/ https://www.instagram.com/reel/CpTFLgalV5j/

<u>Overall Feedback:</u> Feedback was given by the teachers as monitors since (especially the younger participants) were not able to answer questionnaires.

Regarding the level of content, the overall expectations were fulfilled.

Very good:

- Connecting science and students via interactive and hands-on activities
- Ability to experience science firsthand and gain deeper understanding of complex topics
- The challenges RE-EURECA-PRO created via educational games referring to skills like creativity, problem solving, and teamwork Requests for improvements:
- more time on a specific topic, such as responsible consumption and production
- Fostering further collaboration between the university and schools; ensuring a continuation of the knowledge gained during the event

## University of Petrosani (UP)

<u>Time Frame of Implementation:</u> from October 30<sup>th</sup> to November 02<sup>nd</sup>, 2023

Target Group: 100 high school pupils, 20 students

<u>Content/Framework:</u> The main goal was for high school students to get to know the academic environment and for university students to get to know projects and sustainable ideas/solutions. Within this framework three presentations were held which the participants attended.

- "Gender and Discrimination" presented by Professor Robert Prodanciuc, Vice Dean Faculty of Sciences of UP
- "Circular Economy in the Valorization of Contaminated Sites" presented by Professor Emilia Dunca, Director Department of Environmental Engineering and Geology of UP
- Presentation by Professor Sabin Ioan Irimie about EURECA-PRO and RE-EURECA-PRO project



The UP Project Week took place over four days and was organized as follows:

Day 1:

• Lectures and presentations for students

Day 2:

- Visit to: *Ecopedology Laboratory*, performing microscopic analyses of bioindicators used in monitoring pollution resulting from activity in large combustion plants with the students
- Visit to: The Ecology and Environmental Protection Laboratory, analysis of water, air and soil as well as a check regarding the presence of certain pollutants in fruit and vegetables

Day 3:

• Visit for high school students to: *The Environmental Laboratory*, presentation about different types of waste resulting from industrial activity and the possibilities for their recovery

Day 4:

 Visit for high school students to: *The Geology Laboratory*, presentation of a collection of minerals and rocks; visit to the university campus for accommodation facilities, recreation/sports facilities

Links and References/ Press/ Dissemination:

https://www.eurecapro.eu/re-eureca-pro-project-week-university-of-petrosani/

## Overall Feedback:

A Feedback Survey was carried out at the end of the Project Week at UPET and subsequently evaluated. The summary of the results was included in the event report.

Project Week was a pleasant and useful experience for the high school and university students, who would welcome additional events like this to get to know the academic environment and its research topics.



## b. Summary Implementation MS4 Pupils'/ Citizens University

This section provides an overview of the implementation of the Pupils' University/ Citizens' University (MS4) at the respective partner universities of the consortium. The summary was written with the help of the materials provided by the partner universities. Key categories such as target group, time period, type of implementation, framework program and content taught are discussed. In addition, when recorded by the partner universities, specific details and insights are mentioned and informational material, such as links to reports on the events, is included.

## Mittweida University of Applied Sciences (HSMW; WP2 Lead)

### Time frame of Implementation: June 17th, 2023

Target Group: Elementary school students (age 8 to 12)

### Content/Framework:

On the 17th of June 2023, the RE-EURECA-PRO pupils' university took place at HSMW. The format of the pupils' university is already established at the HSMW, which is why the RE-EURECA-PRO project varied from the already consolidated structures. Instead of a typical children's university with a professor in the lecture hall and usually around 150 participants, the children's university was held in a public park at the "Schwanenteich" in Mittweida under the title "Searching for Traces in the Park" (Spurensuche im Park) with a smaller group size, which enabled a more in-depth examination of the topic and better interaction with the professors. The aim was to make the children's university even more interactive and at the same time to move more towards the town and its citizens by opening up a new environment away from the campus.

25 children (aged between 8 and 12) took part in the event with Prof. Labudde and his digital forensics team in search of clues about the deer "Hubert". They learned about the basics of forensic investigations and sustainable methods for recording and processing evidence.

The key questions were: "How do I handle evidence?"; "How do I behave at the crime scene?" and "How do I store important materials in the long term?". The children also learned about



sustainability within the field of forensics regarding digital files, which can be used to store all kinds of evidence and clues and can be reused for future criminal cases. They also learned about the use of sensitive materials.

While the Pupils' University was taking place, parents were provided with short presentations on the work of forensic scientists at Mittweida University of Applied Sciences and prominent cases in which they were involved.

After the event, the children received a digital "case file" in which the relevant information and important learning materials were summarized.

Links and References/ Press/ Dissemination:

https://www.eurecapro.eu/pupils-university-hsmw/

https://www.hs-mittweida.de/news/aktuell/7905/

Overall Feedback: Very good (4.6 of 5.0 Points)

#### Very good:

- Interactive lecture design that invites active participation
- Additional program and coffee for parents
- Location
- Overall organization

Requests for improvement:

• Group size could be even smaller (indicated by some participants)



### Montanuniversität Leoben (MUL)

<u>Time Frame of Implementation</u>: From 2023 to 2024 on selected weekdays (in the morning) from October 23<sup>rd</sup>, 2023 until February 8<sup>th</sup>, 2024 in a dedicated laboratory space on MUL campus

<u>Target Group</u>: School students: A total of 1231 students participated (65 school groups – 1 group per workshop). Ages: from second year primary school to third year secondary school (8 - 13 years).

<u>Content/Framework:</u> Implementation of several events within the course of an existing lecture/workshop format. The series of workshops was called "Teaching & Learning Laboratory" (Lehr-Lern-Labor). The workshops explored the topic of energy.

The overall aim of the workshops was to explore the different forms and sources of energy (chemical, electrical, solar, wind, kinetic, heat, potential energy, etc.) using interactive teaching and learning methods.

The groups were tasked with creating an "energy poster" – a collage based on images and texts from newspapers, magazines and advertisements relating to different sources of energy and practices of energy consumption.

This was followed by a workshop (duration: 120 minutes) in the teaching and learning laboratory where the pupils carried out various experiments (measuring energy consumption of LED lighting, using electricity testing tools, using lamps to understand the functioning of solar panels). As a post-workshop activity in their local schools, the pupils kept an "energy diary" in which they documented (and reflected on) their personal daily energy usage.

## Overall Feedback:

Feedback questionnaires were completed by one of the school groups: "Biber-Klasse" - 4th grade elementary school (age: 10 years) of the Praxis-Volksschule Augustinum, Graz, Austria. The group attended the workshop on January 17<sup>th</sup>, 2024, with their teacher Dipl.-Päd. Clemens Bernhardt.

The pupils enjoyed being creative and working on the experiments. The majority felt that there was not enough time to do them all, while a few got bored. The teachers decided to



keep up the pace so as not to lose the attention of those who were working fast (there was a danger that they create unrest or do other things instead). Overall, they were curious about the topic and enjoyed the interactive setting.

## Very good:

- Working interactively
- Choice of experiments

#### Requests for improvement:

- More time for solving tasks
- More interactive activities e.g., experiments

### Silesian University of Technology (SUT)

#### Time frame of Implementation: March 23rd, 2024

<u>Target Group:</u> Pupils ages 6 – 9 (Number of Participants: 20) and 10 – 12 (Number of Participants: 36)

<u>Content/Framework:</u> Three different workshops for 56 participants in total:

- Ceramic workshops: Participants learned techniques for making ceramic vessels.
- Bits and pieces about Great Britain: During the workshops, children learned interesting facts about Great Britain and the English language.
- Clone yourself in an hour: Participants could map and make a copy of part of their hand in accordance with the principles of manufacturing dental prostheses.

#### Links and References/ Press/ Dissemination:

https://www.polsl.pl/rjo7-cpn/politechnika-juniora-i-seniora/pjs-23-03-2024-opis-zajec/

#### Overall Feedback:

Very good:

- Participants liked the topics and the opportunity to learn interactively through experiments
- Laboratory visits



- Meeting scientists
- Learning as a group and spending time together

#### Requests for improvement:

- Lower the maximum number of participants
- Adapt the enrolment process → allow long-term registration throughout the entire academic year

### Technische Universität Bergakademie Freiberg (TUBAF)

Time Frame of Implementation: two events on March 7th and 27th, 2024

<u>Target Group</u>: children aged 4-6 years (7 children aged 6 years old, 9 children aged 5 years old and 5 children aged 4 years old)

#### Content/Framework:

The concept of the event is focusing on education regarding the raw materials side of our environment/the children's environment. It was planned to Illustrate a cycle of use and create awareness of how different resources are combined with each other from goods and materials all of them use in their daily lives.

The event was structured in an 80 to 90 minute lecture with alternating elements of lecturing, questioning the children, hands-on experience and visual surprises.

The lecture room is prepared with a wooden box as a visual element as well as an unusual circular arrangement of chairs, to attract the children's interest. In the first 10 minutes, professions such as geologist, miner, mechanic, and electrician are introduced, with representatives in typical work attire explaining their roles and safety measures. The children are allowed to touch resources and minerals. Afterward, the children switch rooms to match the resources on the wall, which helps maintain their attention. Next, the collaboration between different professions in material extraction and the methods used are explained. The presentation then shows which resources are used for building houses and how concrete and asphalt can be recycled. Finally, there is an interactive question-and-answer session with the experts. Optionally, the work of miners for the children's environment can be presented.



A total of 25 children participated in the event, divided into two groups of 10 and 15 individuals, respectively.

### Links and References/ Press/ Dissemination:

@Facebook: https://www.facebook.com/share/p/5913sfQFAVuMFETZ/

### @Freie Presse (regional Newspaper):

https://www.freiepresse.de/mittelsachsen/freiberg/campuszwerge-in-freiberg-auf-spurensuche-waspassiert-in-einem-bergwerkartikel13308195

## Overall Feedback:

Insights from the perspective of the organizers: The use of the media was specified to certain tasks and not too general – this is the key to get consent of the children, but which plays a role is that we invited "Kindergarten" with mostly children from parents with academic background. That can be different when including different "Kindergarten" within the city of Freiberg.

Regarding the feedback from the participants, both groups were asked individually. Due to the age of the participants, the questions and answer options for collecting feedback were adapted accordingly. To avoid ambiguity in the answers, the children were interviewed together with the kindergarten teachers.

## Very good:

- Choice of topics
- The level of complexity of the content was suitable for the target groups Requests for improvement:
- Feedback exclusively from the group in which 15 children attended the event: too hectic and not able to understand too much
  - Note from the organizers: No complaints from the group of 10 children at one event. Since most of the course of the event was similar, it can be concluded that 10-12 children would be more suitable for this event in the future. But the age range between 4 and 6 years was a good choice from the organizer's perspective.



## **Technical University of Crete (TUC)**

### Time Frame of Implementation: March 15th, 2024

<u>Target Group</u>: Students from the Public Music School of Chania (30 students and 3 high school teachers participated)

### Content/Framework:

RE-EURECA PRO, Pupils University: "The Melody of Recycling"

Within a full day of educational activities, a group of students from the Technical University of Crete, with the active help of a specialized musician and manufacturer of basic music instruments, introduced the students of the Music School of Chania how music instruments are created out of recycled materials (e.g., pipes). The TUC students had a series of meetings with the expert during which they collected materials and practiced making musical instruments.

Thus, sustainable methods of production at low cost were taught and manifested to the pupils by the students from the Technical University of Crete during a short introduction. The pupils were organized into groups of string, percussion and wind instruments. At the end of the activity the student groups presented their constructions and played music with them.

Objectives were to teach and show sustainable production methods to the pupils of the public Music School of Chania.

It is worth noting that the participating university student group emerged from the "TUC Project Week" of RE-EURECA PRO Milestone (MS3), that took place in October 2023 (at TUC) and that they are student of the Schools of Chemical Engineering and of Production and Management Engineering.

#### Links and References/ Press/ Dissemination:

As the activity was only for the music school students (and not an open event), it was announced only on TUC's website and RE-EURECA PRO's website.

https://www.eurecapro.eu/the-melody-of-recycling-pupils-university/



https://www.tuc.gr/el/to-polytechneio/symbainei-sto-polytechneio/item/re-eureca-propupils-university-i-melodia-tis-anakyklosis-15032024-moysiko-scholeio-chanion

#### Overall Feedback:

#### Very good:

• Participants mostly liked the topic (making musical instruments out of recyclable materials and testing them)

### Requests for improvements:

• Provide the participants with more time

### Universidad de León (ULE)

<u>Time Frame of Implementation</u>: The Pupils' University at ULE consisted of a two-day event from March 12<sup>th</sup> to 13<sup>th</sup>, 2024 within the course of Expociencia.

<u>Target Group</u>: school students from the two cities in which ULE has campuses: Ponferrada and León

<u>Content/Framework:</u> RE-EURECA-PRO delivered an awareness-raising workshop on Women in STEM Science as part of "Expociencia". Expociencia is the ULE-funded scientific dissemination event to promote research and entrepreneurial vocation and disseminate the work carried out by ULE research groups (<u>https://expociencia.unileon.es/</u>).

During the mornings from 10:30 to 13:30, school and high school groups visited the workshop stand in pre-scheduled 45-minute slots, with four groups each day. The workshop, attended by 189 students aged 11-17 from various public and state-subsidized schools, involved activities tailored to different age groups.

Each session started with an introduction to RE-EURECA-PRO, STEM fields, and Sustainable Development Goal 12. The main activity was a "Breakout" workshop focused on Hedy Lamarr, aimed at highlighting the role of women in science. Students discovered Lamarr's identity by solving five sequential challenges, each unlocking a puzzle piece. This hands-on activity illustrated her invention's impact on modern technologies like GPS, Bluetooth, and WiFi. Once



the puzzle was completed, a volunteer revealed Lamarr's identity and her significant contributions to information and communication technologies.

Links and References/ Press/ Dissemination:

### https://expociencia.unileon.es/

<u>Overall Feedback:</u> Organizer's Note: Feedback questionnaires were filled in with the information that was collected from the 8 teachers who accompanied the students, in compliance with legal regulations. In addition, some extra, general perceptions from teachers were collected while developing the activities and talking with them.

### Teachers' opinions:

- Content level of the workshop thoughtfully curated → offered a rich and comprehensive learning experience
- Workshop aligned with current educational demands; depth of content reflected current school topics; insights match important civic topics
- Materials provided potential to challenge younger participants' understanding
- Valuable educational perspective, especially in promoting public engagement and understanding

#### Very good:

- The level of well-researched content of the workshop: rich and comprehensive educational experience well suited to current educational needs
- Workshop considered as impactful by teachers
- Approach to directly involve students through stepping into the role of scientists <u>Requests for improvements:</u>
- Within the context of collaboration with schools: establish a more direct correlation between the topics addressed in the curriculum and those explored in the classroom → reinforcing existing knowledge, facilitating a more seamless integration of learning experiences



## University of Petrosani (UP)

Time Frame of Implementation: March 29th, 2024

Target Group: school and university students

<u>Content/Framework:</u> The focus of the UP Pupils' University was on letting school students get to know the academic environment and students to get to know projects and sustainable ideas/solutions. 23 school students and 10 university students attended the following presentation:

- Short Presentation by professor Sabin Ioan Irimie about EURECA-PRO and RE-EURECA-PRO project
- Presentation by professor Sabin Ioan Irimie about "Wood: Our Sustainable Friend"

The UP Pupils' University took place in one day and was organized as such:

- 9:30 to 10:00 Welcome by the rector at the rectorate and overview of UP campus;
- 10:00 to 10:30 Visits for school pupils to: The Remedial Educational Centre for Capacitated Students of the University of Petroşani (C.R.E.S.C.), presentation by professor Felicia Andrioni;
- 10:30 to 13:00 Visit for school pupils to one of the surface mining laboratories where they are presented with different types of miniature models of mining operations, presentations by Sabin Ioan Irimie and artistic activities involving natural materials, presentation by professor Razvan Itu;
- 13:00 to 14:00: Lunch at UP cafeteria.

Links and References/ Press/ Dissemination:

## https://www.instagram.com/p/C5Q2QzeMMwg/?utm\_source=ig\_web\_copy\_link&igsh=MzR IODBiNWFIZA==

<u>Overall Feedback:</u> After completing the UP Pupils' University, school and university students received the evaluation questionnaire (prepared by HSMW). Upon receiving the filled-out questionnaires, confirmation of attendance letters were sent to the participants. Overall, and based on participants comments, the UP Pupils' University was a pleasant and useful



experience to the school and university students, who would welcome additional events like this to get to know the academic environment and its research topics as well as play and experiment a bit with them.



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