

Erasmus+ KA2 Knowledge Alliances project "Greening Energy Market and Finance - GrEnFIn"

AGREEMENT NUMBER: 612408
PROJECT NUMBER: 612408 – EPP-1-2019-1-EPPKA2-KA

WP4 – D4.7 Final report concerning the "GrEnFIn Full Immersion experience" and D4.8 Reports about the criticality of the tested learning and possible solutions





Work Package (WP)	WP4 – Pilot Class of the Study Plan	
WP Leader	UEK	
Deliverable Title and Number	WP4 – D4.7 Final report concerning the "GrEnFIn Full	
	Immersion experience" + D4.8 Reports about the criticality	
	of the tested learning and possible solutions	
Release date	25/07/2022	
Version	Version 1	
Dissemination Level	Public	
Authors	Ewa Dziwok, UEK	
Revised and Approved by	Prof. Silvia Romagnoli	

INDEX

1.	Introduction	3
2.	Structure and organization of the Full Immersion Experience	4
2.1.	Overview	4
2.2.	Scope for Student trainees	5
2.3.	Scope for Professional trainees	9
3.	Full Immersion Experience - Students' opinion - June 2022	12
3.1.	Overall evaluation	12
3.2.	Organisation and logistic	13
3.3.	Lectures	13
3.4.	Case studies	14
3.5.	KPI	14
4.	Full Immersion Experience – Professionals' opinion – June 2022	15
4.1.	Learning units and online platform	15
4.2.	Case studies	16
4.3.	KPI	16
5.	Full Immersion Experience – Lecturers' opinion – June 2022	17
6	Criticalities of the tested learning and possible solutions	18

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408





1. Introduction

The educational path was planned to be tested through three events:

- 1) 1st GrEnFIn Summer School, 8-11 June 2020, Bologna (organized online due to the Covid-19 emergency)
- 2) 2nd GrEnFIn Summer School, 7-11 June 2021, Katowice (organized online due to the Covid-19 emergency)
- 3) GrEnFIn Full Immersion Experience, 20-23 June 2022, Bologna-Bertinoro

This document shows the steps of the third Testing Phase: descriptive report about the structure and the organization of the Full Immersion Experience, 20-23 June 2022, Bologna-Bertinoro (part 2), description of the experienced Testing Phase: perceived appreciation of students (part 3), opinion of partners (part 4), and reports about the criticality of the tested learning and possible solutions (part 5).

Taking into account that the planned event was a final trial before starting the Joint Master the main aim was to validate the tested contents and methodologies. This is why a participating group was planned to consist of Students and Professionals who work together under the supervision of Company Partners and University Teachers. Because of differentiated cohort, having experience and feedback from the last year event (Summer School organised together with Summer Training) the consortium decided that the organisation of this event would run parallel (application procedure, acceptance etc) however during the event itself whenever it is possible the cohort should be merged to achieve the benefits coming from synergy and exchange of experience and knowledge. This is why during the whole preparation period all information shared among partners precisely described differences between these events (from one side) and underlined a necessity of finding touching points (from the other side).

			PROGRAM of the FULL IMMERSION EXPERIENCE BOLOGNA-BERTINORO 2022			
Day	Hours	room	PROFESSIONALS	STUDENTS	room	
	9.00 - 9.30	Jacopo da Bertinoro	Opening		Jacopo da Bertinoro	
	9.30 - 12.30	Jacopo da Bertinoro	Case studies presentations		Jacopo da Bertinoro	
Monday	13.00 - 14.00		Lunch			
June 20	14.00 - 15.30	Garrison	Case studies preparation (group work). Q/A session 14.00-14.30	Energy Transition and Commodities Supercycle - Helyette Geman, Birkbeck- University of London & Johns Hopkins University	Jacopo da Bertinoro	
	15.45 - 17.15	Garrison	Case studies preparation (group work). Q/A session 15.45-16.15	Optimal regulation for electricity decarbonation Rene Ald, Université Paris Dauphine	Jacopo da Bertinoro	
	9.00 – 10.30	Garrison	Case studies preparation (group work). Q/A session 9.00-9.30	Quantity-adjusting options: hedging financial products for climate risk - Silvia Romagnoli Alma Mater Studiorum Università di Bologna	Jacopo da Bertinoro	
Tuesday,	10.45 - 12.15	Garrison	Case studies preparation (group work). Q/A session 10.45-11.15	Time series analysis with applications to green energy markets - Andrea Mazzon Ludwig-Maximilians-Universitaet Muenchen	Jacopo da Bertinoro	
June 21	13.00 - 14.00		Lunch			
	14.00 - 15.30	Garrison	Case studies preparation (group work). Q/A session 14.00-14.30	Climate economics and asset valuation changes. Régis Gourdel Vienna University of Economics and Business	Jacopo da Bertinoro	
	15.45 – 17.15	Garrison	Case studies preparation (group work). Q/A session 15.45-16.15	Green bonds and beyond – greening of financial markets Ewa Dziwok University of Economics in Katowice	Jacopo da Bertinoro	
	8.00 - 9.00	Garrison	Discussion of results and future steps	TEST	Jacopo da Bertinoro	
Wednesday	9.15 – 12.30	Jacopo da Bertinoro	Case studies' preparation (group work with supervisors / Professionals) Q/A session 12.00-12.30		Jacopo da Bertinoro	
June 22	13.00 - 14.00		Lunch			
	14.00 - 15.00	tbd	Case studies' preparation (group work with supervisors / Professionals)		tbd	
	15.00 - 15.15	Jacopo da Bertinoro	Final conclusions		Jacopo da Bertinoro	
	15.30 - 17.00	tbd	Preparation of the presentations		tbd	
	8.30 - 9.00	Jacopo da Bertinoro	Questionnaire filling		Jacopo da Bertinoro	
Thursday,	9.00 - 13.00	Jacopo da Bertinoro	FINAL PRESENTATIONS		Jacopo da Bertinoro	
June 23	13.30 - 13.45	Jacopo da Bertinoro	Closing		Jacopo da Bertinoro	
	14.00 - 14.45		Light Lunch (served next to the Classroom)			
	14.45		Transfer to Bologna / airport			
i À ⊟r	With the support of the This information and right part and an initial part of the support of the Encourage Program man. The information of the support of the Encourage Program man. If the support of the Encourage Program man and the support of the Encourage Program man and souther server and server serv					

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



2. Structure and organization of the Full Immersion Experience

2.1. Overview

After the First Summer School - Bologna (June 2020) and the Second Summer School - Katowice (June 2021), when the first two tests of methodologies and innovative multidisciplinary features was done, the consortium analysed the criticalities that emerged. This is why a slightly different structure was assumed to achieve a closer interrelation between science and business. This is why a slightly different structure with closer cooperation between Students and Professionals was assumed to achieve a closer interrelation between science and business.

A main purpose: to provide a strong link between the topics of the (E-learning) lectures and the Case studies Because part of the school – devoted to Students – would enable them to achieve ECTS points, an internal procedure is necessary. A request for a course programme acceptance involved a syllabus of a proposed course and proposed ECTS points. Such proposal was prepared and accepted by the University authorities.

The Full Immersion Experience was planned as 4-days event that would take place in Bertinoro. The participating cohort was planned to consist of 30 Students (5 from each University partner, with scholarships) and 10 Professionals. That was slightly different from what was originally planned (number of Students was extending from 10 to 30) but it was a result of former Summer Schools (in Bologna 2020 and in Katowice 2021) which was organised in virtual form because of Covid-19 pandemic situation.

The 2022 edition started from developing three case studies that were prepared and delivered by GrEnFIn business partners. The idea of the Full Immersion Experience was that through a theoretical development (based on lectures from university partners), students were able to solve the case studies with the Professionals and business partner support. Additionally, to achieve a synergy with scientific part, a possibility to participate in lectures was created for Professionals.

Among the submitted cases, the consortium has selected three that reflect three specialisations (track) planned in Joint Master:

- Track 1 Renewable Technologies Case Study: *A Biomethane Plant and Green Hydrogen* proposed by Hera Group, Italy
- Track 2 Environmental Finance Case Study: Greek and Iberian Electricity Markets proposed by Ego
 Energy
- Track 3 Climate & Business Case Study: *Construction of an Microgrid Cooperating with a Residential Estate and Installation for Refueling Buses with Hydrogen* proposed by Tauron Polska Energia

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



As an effect of the case study choice the business partners prepared the short notes with research questions of the case studies, starting conditions, main challenges and expected theoretical knowledge (lectures) that would be sent to all partners to facilitate the choice of the lecture's topics. All university Partners sent the proposals of their lectures which topic was related with the topic of the case studies and expected lectures.

The students were introduced to the Case study and participated in its resolution. Professionals presented the Case study to the coming students, described the topics and the type of subject involved. The students brought their contribution, fresh from their courses and their theoretical background, while the professionals had the occasion to simulate and instantly evaluate their managerial approach.

2.2. Scope for Student trainees

The course for students is divided into three phases:

- (1) Preparation/pre-readings;
- (2) Summer School and project preparation phase;
- (3) Test.
- (1) Phase = Pre-readings Taking into account the fact that not all students are familiar with the electricity market the first phase was a preparatory one and involved pre-readings. The pre-readings were based on three texts that provided a theoretical overview of different approaches to understand climate changes. The students were obliged to answer for 10 questions and upload the answers until 13th of June 2022 via Google form: https://forms.gle/C4Kzyqf15BqSFn7k6

The pre-readings provide a general introduction to the topic and a background for the group work which will take place during the 2nd GrEnFIn Summer School in Katowice and covered:

- ✓ IPCC, 2014: Climate Change 2014: Synthesis Report.

 https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf
- ✓ IRENA (2019), Global energy transformation: A roadmap to 2050 (2019 edition), International Renewable Energy Agency, Chapter: Mixed Progress on The Energy Transition.

 https://www.irena.org//media/Files/IRENA/Agency/Publication/2019/Apr/IRENA_Global_Energy_Transformation_2019.pdf
- ✓ Edward J. Hoffman, Matt Kohut (2012) NASA's Journey to Project Management Excellence. National Aeronautics and Space Administration,

 https://www.nasa.gov/pdf/709495main_NASA_Journey_to_PM_Excellence.pdf

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



PRE-READINGS (30%)

Students analyse pre-readings individually and send the answers via Google form by the 13th of June

Individual students' work.

Preparing the answers and sending it via:
https://forms.gle/C4Kzyqf15BqSFn7k6

Pre-readings assessment

FULL IMMERSION EXPERIENCE -GROUP WORK PRESENTATION (40%) and TEST (30%)

Company Experts present a project which will be realised through group work with Professionals' support.

University teachers deliver supportive lectures.

Wednesday morning, 22.06 - TEST – students write the test - questions come from lectures (a multiple choice test with one correct answer).

The students' cohort is divided into 6 parallel streams leaded by the Professionals (Inside each of 3 streams 2 groups of 4-5 students are created to solve the dedicated case).

The Professionals supervise the group to check the progress and support students' work if necessary.

The final presentation in a form of ppt is prepared and presented by each group on Thursday morning (23rd of June).

CASE STUDIES presentation intro given by Company Experts

University teachers deliver the supportive lectures for all three case studies.

TEST
a multiple choice with one correct answer

Case Study 1 Track 1 -Renewable Technologies. Group work coached by Professionals Case Study 2
Track 2 Environmental
Finance
Group work
coached by
Professionals

Case Study 3
Track 3 Climate &
Business
Group work
coached by
Professionals

PROJECTS PRESENTATION

Final Assessment

The questions for Students' pre-reading parts were as follow:

- IPCC, 2014: Climate Change 2014: Synthesis Report.
 https://www.ipcc.ch/site/assets/uploads/2018/02/AR5 SYR FINAL SPM.pdf
 - 1) What are the key-differences between the major strategies for reducing and managing the risks of climate change (Adaptation, Mitigation and Sustainable Development)?
 - 2) Which of mentioned strategies for reducing and managing the risks of climate change do you consider helpful in countries at different levels of development? Please explain why.
 - 3) What kind of risk/s connected with future climate changes are the most crucial from your point of view? Please explain why?
- ✓ IRENA (2019), Global energy transformation: A roadmap to 2050 (2019 edition), International Renewable Energy Agency, https://www.irena.org/
 /media/Files/IRENA/Agency/Publication/2019/Apr/IRENA Global Energy Transformation 2019.pdf

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



- 4) Please assess last 20 years of energy transformation and explain whether in your opinion the progress is satisfactory. Explain why.
- 5) Which of renewable is in your country the most attractive source of electricity? Explain why.
- 6) Pease shortly describe how do you understand socio-economic footprint and its influence on GDP, employment and welfare.
- 7) Which sector (power/transport/ industry/building) plays in your opinion a crucial role in transformation process (which one should be the leader of transformation)? Explain why.
- 8) Do you believe that people/world is able to achieve assumed goals before 2050? Please argue why/why not.
- ✓ Edward J. Hoffman, Matt Kohut (2012) NASA's Journey to Project Management Excellence. National Aeronautics and Space Administration,
 - https://www.nasa.gov/pdf/709495main NASA Journey to PM Excellence.pdf
 - 9) Describe new concept of teams in project management. What, in your opinion, is crucial in team work to achieve the success?
 - 10) Individuality or being a part of team? Is it possible to combine it? Explain.
- (2) Phase = Physical event Bertinoro To participate to the summer school the students were divided into 6 groups with 4-5 persons in each. Because of three case studies, each case study was analysed by 2 groups and supervised by Professionals as well as case study developer:
 - To support students' work, the case study experts prepared also additional materials which were available for students before and during the Full Immersion Experience. The final part of the group work was planned in a form of group presentations on Thursday. The groups presented their presentations and were assessed by the consortium representatives. This part was divided into several (five) stages:

Stage 1: Welcome and short description of the programme

The core of this part will be a description of the GrEnFIn project and aims. The aim is to familiarize the participants with the purposes of the project and introduce the consortium. Students will receive a general overview of the stream and detailed explanation of the program and its requirements.

Stage 2: Case study presentations

The Company representative/expert (the author of the case study) introduced the problem to be solved. The presentations allowed the students to get an overview of the case study and to understand key purposes of the project. During the week each cohort had an opportunity to meet the Company representative to achieve additional support, coaching and to discuss the progress. In particular, students groups were leaded by:

✓ Hera Group, Italy - Track 1 (Renewable Technologies) Case Study entitled: A Biomethane Plant and Green Hydrogen;

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



- ✓ **Ego Energy** Track 2 (Environmental Finance) Case Study entitled: Greek and Iberian Electricity Markets;
- ✓ **Tauron Polska Energia** In Track 3 (Climate & Business) Case Study entitled: *Construction of an Microgrid Cooperating with a Residential Estate and Installation for Refueling Buses with Hydrogen*;

Stage 3: Lectures

These lectures were presented by the professors from project partners universities and from companies. They talked about important aspects and recent developments in greening energy markets and finance. In particular, the lectures included:

- ✓ Prof. Helyette Geman, Birkbeck- University of London & Johns Hopkins University: Energy Transition and Commodities Supercycle
- ✓ **Prof. Rene Aid**, Université Paris Dauphine *Optimal regulation for electricity decarbonation*
- ✓ **Prof. Silvia Romagnoli,** Alma Mater Studiorum Università di Bologna *Quantity-Adjusting Options:* Hedging Financial Products for Climate Risk.
- ✓ **Prof. Andrea Mazzon,** Ludwig-Maximilians-Universitaet Muenchen *Time series analysis with applications to green energy markets.*
- ✓ Prof. Régis Gourdel, Vienna University of Economics and Business Climate economics and asset valuation changes
- ✓ Prof. Ewa Dziwok, University of Economics in Katowice Green bonds and beyond – greening of financial markets.

Stage 4: Group work

From Monday to Wednesday the students worked in sub-groups of 4 to 5 participants each on one of case studies. The groups were coached by an expert/supervisor coming from company partners that delivered the case studies as well as the Professionals. They holded regular meetings to provide a solution for the case study that covers topics tightened with greening energy markets and finance. The findings were reported at the end of the week by each group in a form of a ppt presentation.

Stage 5: Group presentation

On Thursday the outcome was presented by the group and evaluated. The evaluation was based on the following criteria:

The evaluation of the presentation takes into account the level of:

- ✓ Arguments used Did the Group use data effectively to achieve its aim? (0-10)
- ✓ Methodology Did the Group use appropriate tools and theories? (0-20)
- ✓ Team involvement Did the Group cooperate? Were they convincing? (0-5)
- ✓ Materials Quality of slides (0-5)
- (3) Phase = Test On Wednesday morning (22.06) students was planned a written test that summered their knowledge got from the lectures. The lecturers from Birkbeck, IMPA, WU, LMU, UEK, Unibo, Paris

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



Dauphine were asked to prepare 5 questions (multiple choice with 4 answers – and one correct) connected with their lectures. In case of lectures delivered by two professionals 1 question was created.

2.3. Scope for Professional trainees

The aim of the GrEnFIn project was a creation of a Professional Module addressing the skills gaps of experts currently working in the energy sector especially concerning the knowledge of the financial green products, pivotal to sustain a reconversion of the economy to the green energies. Starting from data collected from the questionnaires (external consultations), the partners prepared and discussed the draft curriculum of the professional module.

To test the professional module (a short version of it) and to test new educational methodologies firstly a Summer training was organized in June 2021 as the first assessment experience. The final check was organised in a form of the Full Immersion Experience in Bertinoro in June 2022. It was planned as 3 days-activities to involve 10 professionals who worked with students to solve 3 chosen case studies prepared and delivered by Company GrEnFIn Partners.

- **Structure** Following last year idea (developed before the Summer Training in Katowice) a structure that consists of 3 sections was maintained. The first two sections were not compulsory, but freely accessible by professionals after the subscription. Each section was divided into learning units. At the end of each learning unit, the user would have to perform a learning verification test and a satisfaction questionnaire; there is no threshold to pass the test but our suggestion is to move to the next learning unit only if at least 6'% of the questions has been answered correctly. The final phase was the 3-days event in Bertinoro.
- **Schema** To clarify the didactic process the content of the summer training was created and accepted by partners. It covered the main structure of the summer training its division into three phases:
 - Section 1 called "Understanding" This section is composed of four learning units divided into video lessons online that covers the following topics: greening corporate strategy, business opportunities and the EU green deal, financial tools in support of the green (R)evolution, green infrastructure. These learning contents are not compulsory, but freely accessible. It is strongly recommended to carry out all lessons to access section 2
 - Section 2 called "Applying" This section is composed of three learning units divided into video lessons online that covers the following topics: economic and financial fundamentals of project evaluation, risk-management tools for a full-blown representation of the project, support schemes for

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



green investments (feed in tariffs, feed in premia, contracts for differences, (green) certificates, auction mechanisms).

- Section 3 — called "Thinking Complexity" - This section covers a short-term experience in which participants have the chance to attend face-to-face lectures and develop project work together on the basis of one or more case studies. The Full Immersion Experience involves the professionals into the resolution of a Case Study provided by the main industrial partners of the GrEnFIn project. The professionals will be divided in teams and will start dealing with the Case Study for the first two days, assisted by the GrEnFIn's team that created them. The Case Study will be focused on the topics of energy, green finance and quantitative methods. In the last two days of the experience the Professionals will join with the students coming from GrEnFIn's University partners, they will support the Case Study resolution process by collaborating with the Professionals recreating a senior — junior environment.



Section 1 – Understanding

This section is composed of four learning units divided into video lessons online that covers the following topics: greening corporate strategy, business opportunities and the EU green deal, financial tools in support of the green (R)evolution, green infrastructure. These learning contents are not compulsory, but freely accessible. It is strongly recommended to carry out all lessons to access section 2.



Section 2 – Applying

This section is composed of three learning units divided into video lessons online that covers the following topics: economic and financial fundamentals of project evaluation, risk-management tools for a full-blown representation of the project, support schemes for green investments (feed in tariffs, feed in premia, contracts for differences, (green) certificates, auction mechanisms).

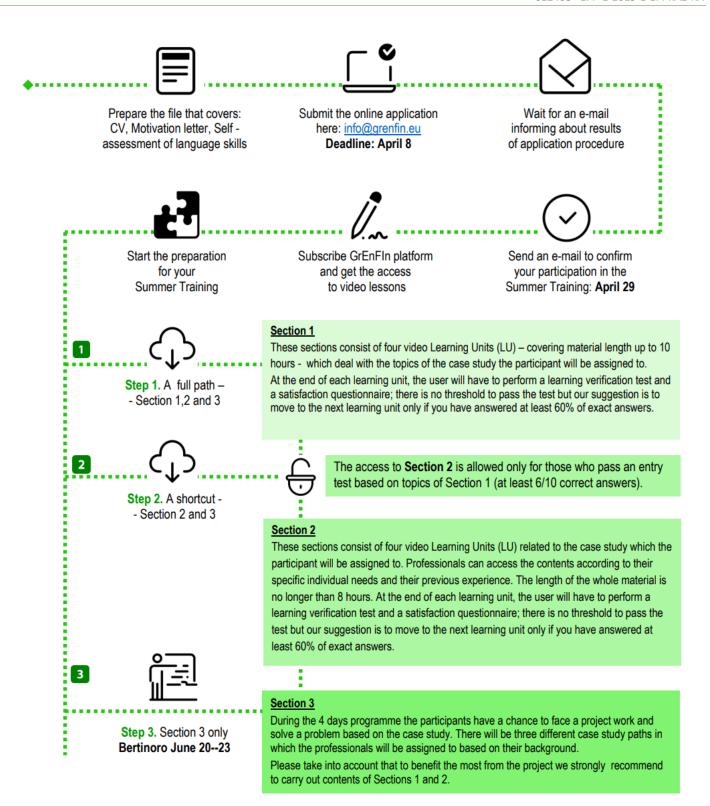


Section 3 – Thinking Complexity

This section covers a short-term experience in which participants have the chance to attend face-to-face lectures and develop project work together on the basis of one or more case studies.

Below there is a simplified version of the schema.





Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



- Section 3 Full Immersion Experience Bertinoro 2022 Among the submitted cases, the consortium has selected three that reflect different specialisations (tracks):
 - Track 1 Renewable Technologies Case Study: A Biomethane Plant and Green Hydrogen proposed by Hera Group, Italy
 - **Track 2** Environmental Finance Case Study: *Greek and Iberian Electricity Markets* proposed by Ego Energy
 - **Track 3** Climate & Business Case Study: *Construction of an Microgrid Cooperating with a Residential Estate and Installation for Refueling Buses with Hydrogen* proposed by Tauron Polska Energia

During the 4 days programme the participants had a chance to face a project work and solve a problem based on the devoted case study (one of three described above). The main purpose of the Full Immersion Experience was to achieve a synergy effect between two cohort – students and professionals. A possibility to organise this event in presence enabled to reformulate a former idea and increase an overall satisfaction coming from direct meeting.

3. Full Immersion Experience - Students' opinion - June 2022

3.1. Overall evaluation

In general, results show a very good level of satisfaction: overall rating of 4.6 (coming from 25 responses). It is an improvement of general satisfaction from participants with regards to events organised one year and two years ago. Although a majority found the workload to be appropriate there are still some places where the structure could be improved: 18 found the programme duration appropriate and 7 too short, use of the UNIBO address for it can be an issue, information on the application process complicated to gather, Wifi could be improved. There is a need to mention the fact that the full immersion experience was the first event running in person – students emphasised an additional value of the event coming from a possibility of the personal (not online) participation.

Three of Participants had taken part in a GrEnFIn programme before, saying either that Full Immersion Experience was better, or that both experiences had been complementary.

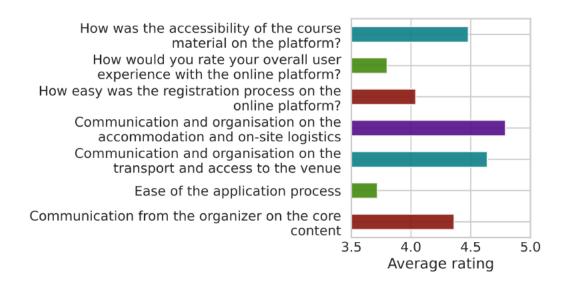
With the support of the Erasmus+ Programme of the European Union



The following evaluation material describes in details an evaluation of participants (students) concerning an organisation of the event (communication and logistic), content (workload, lectures), and student's opinion about case studies.

3.2. Organisation and logistic

Generally, the feedback on organisation and logistics was good. All parts received ratings between 3.7 (the ease of the application process) to 4.8 (communication and organisation on the accommodation). Nonetheless, with regard to the organisation, a number of students in their comments suggested improvements relating mostly to the application process via UNIBO platform which is an issue independent from GrEnFIn consortium (internal procedure devoted to all students participating in short term programmes organised by UNIBO).



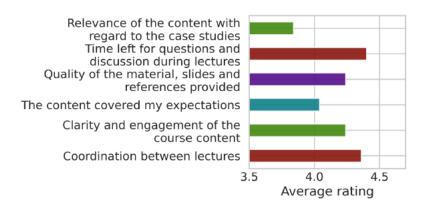
3.3. Lectures

Most students accessed the materials sent in advance and the duration of the Full Immersion Experience as appropriate. Other responses are split between 3.8 and 4.4. The highest grade was received for "time left for questions and discussion during the lecture" and to "coordination between lectures" which comes from an additional value being the result of the meeting in person.

More specifically, several respondents perceived the lectures could be more practical, and considering the test - some students found it difficult while another part seemed it as reflective of the lectures.

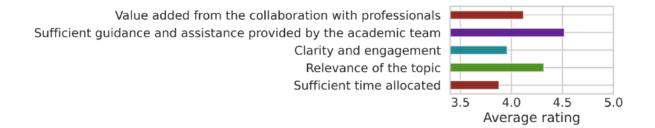
Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408





3.4. Case studies

Students assessed three different case studies, mostly appreciate a sufficient guidance and assistance provided by the academic team (4.5 grade on 5). The relevance of the topics received the second highest grade in the dedicated quantitative evaluation. Overall grades given by students for the time allocated were less satisfying, with an average of 3.8. Most of the written feedback was also very positive, with most students apparently satisfied. Although most Students accessed the material in advance, some suggestions were connected with: presentation format (could be indicated more clearly), the role in solving the case study (could be more important); professionals (time devoted to the collaboration with students).



3.5. KPI

There were 28 participants of the Full Immersion Experience (among them there was 1 auditor). It means that we had 27 actively participating students. This year we received 25 responses, so we can assume that almost all actively participating students filled in the questionnaire. Thus, responses analysed should be almost perfectly representative of the opinion of students, also marking an improvement compared to the previous year. In addition, the number of written comments left is significant and provides a valuable feedback.

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



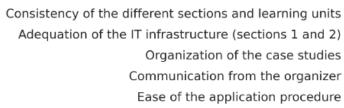
4. Full Immersion Experience – Professionals' opinion – June 2022

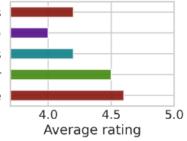
In general, results show an overall rating of 4.7 (coming from 11 responses). Most professionals attended following a direct invite, except for two from LinkedIn. A majority found the workload to be appropriate, as well as the duration of the training, and the duration of learning units. With regard to the non-lecture attendance: one mentioned a redundancy with a previous training, and another a lack of time. All of them accessed the material in advance. The suggestions covered: access to some lectures (could be better), Issues with facilities.

The following evaluation material describes in details an evaluation of participants (professionals) concerning learning units and online platform (division, organisation, content, registration, utility), and opinion about case studies (Full Immersion Experience itself).

4.1. Learning units and online platform

Generally, the feedback about Section 1 and Section 2 (delivered as an online materials) as well as the usability of the platform was good. All parts received ratings between 3.4 (quality of materials) to 4.3 (consistent with objectives). The main suggestions touched the accessibility (Section 3 material not available on time) and technical issues that could be improved (audio - sound too low).



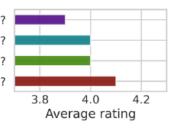


How was the assignation process to the course track?

How was the accessibility of the course material on the platform?

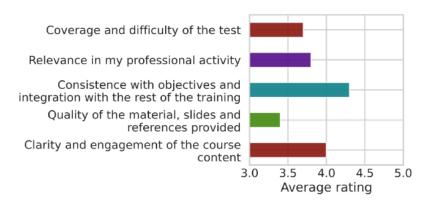
How would you rate your overall user experience with the online platform?

How easy was the registration process on the online platform?



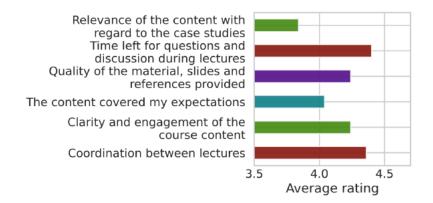
Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408





4.2. Case studies

Most Professionals accessed the case studies as appropriate – their responses were split between 3.8 and 4.4. The highest grade was received from "time left for questions and discussion during lectures" and to "coordination between lectures" which comes from an additional value being the result of the meeting in person. More specifically, respondents suggested: better opportunity for initiative and differentiation given to students in the case studies, tracks (could have dedicated sections), and content (better flagged for tracks in general). Additionally the format of collaboration with students was not clear in advance, and the allocation of time with them before the third day could be better.



4.3. KPI

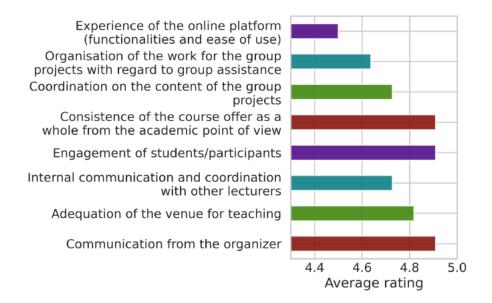
There were 11 participants of the Full Immersion Experience and all filled in the questionnaire. The analysed responses should be a perfect representative of the opinion of professionals providing a significant feedback. To summarize, the opinion about testing part (Full Immersion Experience) as an event for the Professionals was overall positive.

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408



5. Full Immersion Experience – Lecturers' opinion – June 2022

Lecturers provided feedback on various apsects of the summer school and summer training. It received a total of 11 responses, among whose 8 was recording as lectures, 8 as person assisting groups in the case studies and 5 giving a lecture to students The feedbeck was very positive (overall experience rated 4.9 in the scale from 1 to 5) with enthusiastic comments.



On average, all points received good ratings, with a minimum being above 4.5 on a scale from 1 to 5. The experience of the online platform was the aspect that received the lowest average rating, with a written comment also pointing to a relative lack in that area (videos: transitions, sound check, slides available at the same time, upload process). The second worst average is on the organisation of students'work – there was a suggestion that the amount of time for students to discuss the case study could be slightly increased.

Considering the duration of the summer school, of the programme - everyone found the time allocated for lecturer appropriate. Regarding the time dedicated to questions and answers with students, the answers varied - one respondent said it was too short, while the others said it was appropriate. Thus, the durations of both seems fine based on a majority of respondents.

Erasmus+ Knowledge Alliances Call EAC/A03/2018 - GA 612408

With the support of the Erasmus+ Programme of the European Union



6. Criticalities of the tested learning and possible solutions

To summarize, the evaluation gathered from participant was overall positive; among students, there was some awareness about the signing procedure while among professionals – not perfect quality of the delivered online materials. Based on the comments of students, professionals and lecturers, the future Intensive Programme (as a part of planned Master Study curriculum) is expected to be organized in more qualitative way to reduce the arising technicalities. Taking into account how positive was the feedback about the case studies, the biggest pressure should be put on applicability of the delivered knowledge. All these results were confirmed by sufficient number of responses.

For the next events there is a need to solve several still appearing problems. A possible solution is as follow:

- ✓ The clarity of the programme could be still improved to meet participants' expectations, which need to be understood better (probably a good manual could improve an overall feeling).
- ✓ There is a need of further applicability of the programme and finding a good balance between theory and practice more applied modules received better feedback comparing to the more theoretical ones which were found to be too dense for that format of teaching (intensive programme) and for participants who don't have a quantitative background.
- ✓ There is a need of further improvement of the content how general lectures should be (whether they should deliver some general knowledge or should be directly devoted to proposed case studies) Maybe some "core" knowledge should be established.

With the support of the Erasmus+ Programme of the European Union

Greening Energy Market and Finance































Project website: http://grenfin.eu

