



*Erasmus+ KA2 Knowledge Alliances project
“Greening Energy Market and Finance –
GrEnFln”*

**WP10 – D10.1. Report concerning the internal
evaluation of the results: Report based on
submitted Partners Actions Reports aimed to
evaluation, M18 – M26**



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Executive Summary

In this report, we provide an evaluation for all deliverables (13) received between M18 and M26. Deliverables are first listed in a recap table and then discussed individually, assessing deliverable-level KPIs as set up within WP10 according to the Project Management Framework. A summary of conclusions completes the report.

This second version updates the first one by using the revised set of KPIs designed as part of WP10 to be applied to all recent and forthcoming deliverables.





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1. Summary of deliverables

WP	Lead organization (Pn)	Number	Effective release date	Title	Level (observed)
1	P(3)	D1.7	M21	Local Workshops for Validation with Stakeholders (WP2) Université Paris Dauphine / Birkbeck, University of London	Confidential
1	P(12)	D1.7	M24	Local workshops for validation with Stakeholders – Lisbon, Portugal	Confidential
1	P(14)	D1.7	M25	Local Workshop for Validation with Stakeholders - Athens Greece - Speed Development Consultants SA	Confidential
1	P(5)	D1.8	M21	Summer Schools and Intensive Programmes: Second Summer School and First Summer Training 2021	Confidential
2	P(1)	D2.6	M21	Best-practicing reports on the joint work of academies-enterprises for a green reconversion M15	Confidential
3	P(5)	D3.2 & D3.3	M20	Reports about the Testing Phase: Descriptive report about the structure and the organization of the Second Summer School M20. Description of the experienced Testing Phase: perceived appreciation of students and opinion of partners. <i>and</i> Reports about the criticality of the tested learning and possible solutions	Confidential
3	P(1)	D3.4	M24	Final Draft of the basic structure of the Learning Outcomes	Confidential
4	P(5)	D4.1	M21	Descriptive document of activation of modules in the university of the consortium involved in the existent double degree	Confidential
7	P(5)	D7.1	M21	Final report concerning the “Summer Training” Descriptive report about the structure and the organization of the Summer Training. Description of the experienced Testing Phase: perceived appreciation of participants and opinion of partners.	Confidential



9	P(5)	D7.2	M23	Report on the Preliminary draft of the basic structure of the professional module and its criticalities	Confidential
9	P(1)	D9.1	M19	Report concerning the Internal Quality Assurance process - Semi-annual Quality Report M13 – M19	Confidential
9	P(4)	D9.2	M16	Report on the Internal discussion to elaborate the qualitative and the quantitative insights coming from the external monitoring	Confidential

2. Evaluation by deliverables and KPIs

2.1. Local Workshop for validation with Stakeholders – Université Paris Dauphine / Birkbeck, University of London (D1.7)

This deliverable reports on the event organised by Université Paris Dauphine and Birkbeck University of London on June 29, 2021. The event was an online local workshop that aimed to spread information about the GrEnFin programmes to a relevant audience. Several members of the consortium conducted presentations and feedback from participants was collected in the form of a questionnaire.

Presenters of the event were Prof. René Aïd, Prof. Helyette Geman, and Prof. Sophie Meritet. The minutes provided include remarks by several members of the audience and the responses provided to them.

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 0.2	Number of questionnaires submitted	10	The number is sufficient to carry on some degree of analysis but on the lower end of what we'd expect for that event
PI 0.3	Response rate	45%	
PI 0.7	Number of attendants	22	Number reported

2.2. Local Workshop for validation with Stakeholders – Lisbon, Portugal (D1.7)

This deliverable reports on the event organised by DELAB on October 26th. It was organised online and in Portuguese. The event lasted a bit more than an hour and covered key features of the project, in particular those related to the professional module. The main feedback collected from participants is that the case study presented might be too specific (on the production of gases from renewable sources) and that several case studies with a broader coverage could be preferable.

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
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PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 0.2	Number of questionnaires submitted	8	
PI 0.3	Response rate	73%	
PI 0.5	Appreciation/satisfaction rate	88%	Uses a cut-off grade of 3.5 per respondent
PI 0.7	Number of attendants	11	

2.3. Local Workshop for validation with Stakeholders – Athens Greece - Speed Development Consultants SA (D1.7)

This deliverable reports on the event organised by Speed on October 21st. It was organised online and in English. The event lasted one hour and a half and covered different aspects of the GrEnFin project, the professional module but also the master programme. Four presentations were conducted, as well as a Q&A session. No key point from the discussion is reported, but the participants seem to have been appreciative of the programme presented in general.

Relevant KPIs:

Number	Title	Result	Observation
PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 0.2	Number of questionnaires submitted	7	
PI 0.3	Response rate	47%	
PI 0.5	Appreciation/satisfaction rate	71%	Uses a cut-off grade of 3.5 per respondent
PI 0.7	Number of attendants	15	

2.4. Summer Schools and Intensive Programmes: Second Summer School and First Summer Training 2021 (D1.8)

This report summarises the joint event of the 2nd Summer School and 1st Summer Training, which took place in the second year of the GrEnFin project. More generally, it participates to the testing phase of the GrEnFin curriculum.

A first part describes the initial administrative procedure followed by organisers (in part because a summer school in presence was initially planned), and elaboration of the first syllabus. The subsequent two sections provide details on the summer school and the summer training respectively. Each describes the application procedure and organisation of the participants' selection, as well as the choice of the structure and contents themselves. The descriptions include the details and illustrations for the dissemination material used, and the implementation of various aspects on the GrEnFin virtual platform.

In total, 15 annex documents have been provided on top of the main report evaluated. Thus, the report provides a very well documented overview of the summer programmes organisation. However, it could have





benefited from a conclusion covering the lessons learned from the organisation, and reflecting on what went well or not, in line with comments made in the context of the fifth project meeting.

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	No significant delay occurred in the preparation of the event
PI 0.2	Number of questionnaires submitted	58 (total)	Decomposition: 9 for lecturers, 37 for students and 12 for professionals. As per results from deliverable 10.2, the number of questionnaires submitted was very high for students, and all lecturers and professionals responded.
PI 0.3	Response rate	95% (total)	Decomposition: 100% for lecturers and professionals, and 93% for students
PI 1.5	Rate of overall satisfaction of the partners	89%	The quantitative ratings for organisational items left by partners (here the lecturers involved) in the follow-up survey were by large positive, qualitative comments left were also mostly appraisal. In total 8 lecturers out of 9 could be categorized as satisfied. Method: for each respondent, a general rating has been computed as an unweighted average of all grades that reflect appreciation. As grades are originally given on a scale from 1 to 5, a cut off value of 3.5 was used as 3 can reflect “indifferent” and 4 can reflect “satisfied”.

Some other KPIs that could be relevant here (number of applicants and participants), concerning one of the summer school or summer training, are left out here and applied instead to the reviews of deliverables D3.2 and D7.1 where they seem more important.

2.5. Best-practice reports on the joint work of academies-enterprises for a green reconversion M15 (D2.6)

This document is a follow-up report on the collaboration between academic and industry partners in the design of the project. It builds on a first version that was released after the first meeting dedicated to it. Sections added to the report highlight that the design of the professional module had been so far successful at integrating requests collected from stakeholders.

The subsequent meetings reported (relative to the previous report) show a satisfying collaboration and integration of the stakeholders demands. As for the previous iteration of the report, the identification of best practices does not seem to have been extensively treated as part of the deliverable’s activities. Thus, it remains that the report could cover this in more details. Finally, the document clearly exposes how matters previously identified have been addressed as part of the working package’s recent activities, which is satisfying.

Relevant KPIs:





Number	Title	Result	Observation
PI 0.1	Respect of the deadline declared into the project	Unsatisfied	There appears to be a shift of a few months between the declared and realized dates of the events, although that is not a matter of concern here.

2.6. Second Description of the experienced Testing Phase: perceived appreciation of students and opinion of partners and Reports about the criticality of the tested learning and possible solutions (D3.2 & D3.3)

This document provides a description of the second summer school experience. A first part details the material and the agenda used for the summer school. In particular, it covers the contents of the preliminary readings assigned to students and provides a brief description of the case studies. A second part analyses the responses to the questionnaires that were submitted to students and lecturers.

The description of the summer school (deliverable 3.2) appears to cover all key aspects of the organisation. However, it lacks details on the content of the lectures given, compared for example with the description of readings. It is also not fully clear if there was an attempt to organise the lectures based on said content. More generally, a framing of the programme put in place could have been useful, to justify the choices made in relation to learning objectives.

Essential aspects of the feedback from surveys have been covered. However, results could have been put in relation with the content in a more direct way. The report draws conclusions from the questionnaire results but it could be clearer in how it tried to address challenges that emerged from the previous editions. Finally, the report could benefit from additional proofreading.

Relevant KPIs:

Number	Title	Result	Observation
PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 0.5	Appreciation / satisfaction rate	97%	Most of the feedback collected from students was positive, with quantitative grades given on organisation and content also quite high on average. Method: for each respondent, a general rating has been computed as an unweighted average of all grades that reflect appreciation. As grades are originally given on a scale from 1 to 5, a cut off value of 3.5 was used as 3 can reflect “indifferent” and 4 can reflect “satisfied”.
PI 0.6	Number of applications	64	This information was unfortunately missing from the report itself. More data would also have been useful with regard to the number of applicants from partner universities.
PI 0.7	Number of attendants	43	





PI 3.2	Summer school implemented	Satisfied	The event has been conducted, unfortunately online due to public health concerns, but to the full extent possible with regard to educational material.
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2.7. Final Draft of the basic structure of the Learning Outcomes (D3.4)

This deliverable details the state of the planned curriculum for the joint Master programme, following consultation with partners and stakeholders. The report is based on two events with such consultations.

The deliverable contains in particular information on the different learning areas and courses intended for the programme. Moreover, the profile of the “Sustainable Energy Expert” is further established qualitatively. In that regard, a lack of clarity seems to remain as to the exact scope that the experts trained are expected to master. Indeed, the curriculum appears to include several courses that do not have a very straightforward link to the profile, involving skills that go more in the direction of managing general assets with regard to climate risk, without it being necessarily relevant for green energy assets in particular. Therefore, the narrative and motivation for part of the courses could be reinforced.

In other instances, it is not fully clear what is the level expected of students who choose some of the courses, or how prior acquisition of certain skills would condition the entry to the programme. This is true for instance of some of the most quantitative classes (e.g. mathematical finance) which might require a strong prior background in order to include more advanced topics. Similarly, the use of general term such as “Statistical knowledge” or “Artificial Intelligence” remain vague at this stage as to the actual content of the classes. Some more fundamental teachings such as time series modelling are not mentioned, and thus it is not fully clear whether that kind of knowledge would be expected from the start or whether part of the classes described would have to dedicate time to cover it.

Further, on the course content, it is not explained how the courses proposed (by title) would cover all the content mentioned for a given learning area. In future reports, it might be beneficial to more clearly linked competencies to courses planned. This would also have the advantage of a clearer framework with regard to how important each topic would be time-wise. Lastly, the classification of some topics is not always straightforward, for instance it is unclear how the course on “Cryptocurrencies Market” would actually rely on computer science skills.

The deliverable also provides a useful overview of the three different profiles of sustainable energy experts that would be trained. However, this could also be clarified in the future. For instance, generic terms like “institutions” are used with no clear coverage, and the institution OCSE doesn’t seem to be anything relevant for the sustainable energy expert. Finally, it would be good to clarify to what extent these different tracks would be applied or whether they would allow for more research oriented approaches. Currently, only one mentions research positions as a potential outcome.

More broadly, while some differentiating elements are given in terms of skills and job prospects between the three tracks, the actual differences based on content seem limited. Indeed common mathematical and financial courses appear to constitute a large part of the three curricula, whether they are included in the preparatory courses or in the specialized ones. In particular, the track “Renewable technologies” does not present a strong technical identity, as only two courses appear exclusive to it that would cover more technical aspects of energy production, and the difference between the other two also seems small. To that extent, the





motivation for dividing the programme in these three tracks is somewhat lacking, and would ideally be backed by a comparison to alternative solutions (such as letting students pick electives course by course with only prior requirements of previous courses for some).

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	

2.8. Descriptive document of activation of modules in the university of the consortium involved in the existent double degree (D4.1)

This document describes the organisation of the pilot class that is undertaken by UNIBO, LMU and UEK. This new phase of the project is kick-started by these three universities as they have pre-existing agreements, and it builds on the experience of the summer schools that were previously held. The first part of the document describes the agenda that will be followed by students of the pilot class, which includes time to spend in one of the other universities. A second part reports on broad features of the selection procedure.

The study plan is laid out clearly but could have benefited from further details with regards to the courses, for instance a short description of the content and information on the lecturers.

The document is completed by an annex on the piloting phase, although its formatting appears somewhat odd, and it should probably be qualified as amendment. In the case of such short-term localized changes, it is unclear why that annex should be presented in a separate document as it was, instead of editing a second version of the document that would be clearly identified as such.

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	

2.9. Final report concerning the “Summer Training”. Descriptive report about the structure and the organization of the Summer Training (D7.1)

This document reports on the experience of the first GrEnFin summer training dedicated to professionals, which was organised in June 2021. A first part describes the overall content and organization of the training. A second section examines the feedback that was given by participants through several questionnaires that were submitted to them. Finally, the criticalities identified are examined and solutions are drawn to improve the subsequent trainings. The improvements suggested tackle the challenges identified for both the content and the organisation. Moreover, the case study is given as an annex of the report.





One aspect that might still be to develop is how to make the training more relevant for professionals, which was one weak point identified. In complement to the solutions already put forth, a strategy to further tailor learning outcomes towards matters of relevance could be useful.

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 0.2	Number of questionnaires submitted	12	
PI 0.3	Response rate	100%	
PI 0.5	Appreciation/satisfaction rate	75%	Some of the grades collected reflect a lack of satisfaction with some features, even if most remain positive on average. Method: for each respondent, a general rating has been computed as an unweighted average of all grades that reflect appreciation. As grades are originally given on a scale from 1 to 5, a cut off value of 3.5 was used as 3 can reflect “indifferent” and 4 can reflect “satisfied”.
PI 0.6	Number of applications	24	This information was missing from the document itself.
PI 0.7	Number of attendants	12	The information could have been made more explicit in the report as well.
PI 7.1	Completion of preliminary definition of learning outcomes' structure	Satisfied	The broad structure of the training is clearly exposed in the document, although it is less the case for the learning outcomes per se.
PI 7.2	Summer training implementation	Satisfied	The organisation of the training was successful.

2.10. Report on the preliminary draft of the basic structure of the professional module and its criticalities (D7.2)

This document discusses the draft of the professional module in relation to the first professional training programme conducted in June 2021, and reports on the criticalities to address. An overview of the content is provided, as well as its articulation such as the criteria to use for participants to accede the different sections. We note that part of the organisation is reported from the perspective of in-person planning, and organisational consequences of the online shift are not really described. Moreover, the level of detail in the description of learning units' content was quite heterogeneous. On the other hand, the report provides a good view of issues raised and ways to solve them when relevant for the next iterations of the programme.

Furthermore, note that there seems to be some lack of clarity as to how WP7 is structured, so that this deliverable is given in line with the main Gantt chart of the project, but it does not follow the project management framework. For this reason the KPIs applied below differ from what is normally applicable to D7.2 (because the KPI applicability was defined based on the project management framework).



Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 7.1	Completion of preliminary definition of learning outcomes' structure	Satisfied	

2.11. Report concerning the Internal Quality Assurance process - Semi-annual Quality Report M13 – M19 (D9.1)

This deliverable reports on the third quality board meeting, which was held online on March 11. Details of the topics and discussions are given, featuring in particular: general management decisions and dissemination activities, organisation of the second summer school, and design of the joint degree. On the latter, the key points decided were the presence of an innovative online course, the mobility aspect, the articulation between thesis and internship, and how 12 ECTS could be obtained through a summer school or an intensive programme.

The document appears overall satisfying in its form as well as in its reporting of the different ideas and opinions expressed during the meeting. Three annexes complete this document: the agenda of the meeting, the schedule of the summer school, and a presentation of the Master degree.

Relevant KPIs:

<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Satisfied	
PI 9.1	Restricted discussion sessions and virtual conferences organized	Satisfied	
PI 9.2	Satisfaction rate with the quality assurance process	N/A	No data has been collected for quantitative measures of satisfaction

2.12. Report on the Internal discussion to elaborate the qualitative and the quantitative insights coming from the external monitoring (D9.2)

This report has been produced by the external evaluator of GrEnFlIn, Antoine Mandel, to assess the conduct of the project over the first year. The report is focused on the definition of the curriculum, as suggested in the quality and evaluation plan. Its overall conclusion is positive on the project as a whole, but more critical as to how its direction is presented and framed so far.

We note that the evaluator has had exchanges with WU as the responsible partner for the external evaluation and communicated its early observations for internal discussion. Nevertheless, in-depth discussions to elaborate on the report findings are still partly missing.

Relevant KPIs:



<i>Number</i>	<i>Title</i>	<i>Result</i>	<i>Observation</i>
PI 0.1	Respect of the deadline declared into the project	Unsatisfied	The report has been submitted with some delay due to legal and administrative complication, including rejection by the board of the first evaluator proposed by WU.
PI 9.3	Criticalities emerged from the external report and possible solutions	7	Several unclear points, potential issues and ways for improvements are identified in the report. In spite of the scope being somewhat limited, this provides for many actionable insights. Method: to be counted, a criticality must reflect a distinct problem or inconsistency; suggestions that are given on top are not integrated in the measure.
PI 9.4	Report on external monitoring on the project's development completed	Satisfied	The evaluation is constructive but is also relatively short and should be completed with exchanges so as to best follow up on the findings.





3 Conclusion

The first part of the documents reviewed for this period are reports on the summer school and summer training. They give a useful account of the steps involved in the organisation and examine the criticalities that emerged from the feedback given. These three documents together cover a lot of material, although an even more exhaustive examination could have been considered so as to clarify the initial framing of the summer programmes and identify more granularly the weaknesses reported.

Other documents cover either the work of the first year (D9.2) - where part of the observations have been taken into account in between in the development of the curricula -, or the organisation of the next phases of the project (D2.6 and D4.1). The latter are the blueprints for the development of the pilot class and further academic-industry collaboration, which both show a reasonable degree of advancement.

Another major subject of the deliverables assessed has been the start of the professional side of GrEnFln. This was done crucially through the summer training and extended by validation events conducted by partners, which provided feedback to follow-up on the training. Finally, progress has been made in further defining the curricula of further programmes, both for students and for professionals. More progress and refinements are expected on that side in summer 2022 in the lead up to the full implementation of the joint master programme.

A general issue still observed (and true for previous evaluations) is a lack of clarity with regard to the dissemination level of the deliverables. Virtually all documents assessed were classified as “public”, while in fact none of them were. This should be addressed moving forward. Content-wise, the different documents included in this evaluation cover a lot of what has been achieved so far by the project, and they yield a number of actionable insights for the next steps, which should be included in their design.



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Project website: <http://grenfin.eu>



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