



# Erasmus+



## LaWEEEda

Latin American-European network on waste electrical and electronic equipment research, development and analyses

**D6.5 Quality report M36**



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## Project Coordination:



University of Natural Resources  
and Life Sciences, Vienna

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## European Partners:



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## Latin-American Partners:

*Local Coordination in Brazil:*



UFRJ



*Local Coordination in Nicaragua:*



## Coordenação de Projeto:



University of Natural Resources  
and Life Sciences, Vienna

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## Parceiros Latino Americanos:

*Coordenação Local no Brasil:*



UFRJ



*Coordenação Local na Nicarágua:*



## Project Coordination:



University of Natural Resources  
and Life Sciences, Vienna

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## Introduction

The quality guideline (see D6.1) was approved by all partners within the project meeting in Vienna in December 2017 (see related minutes). The included list of quality indicators and the Gantt-Chart, provided by TUHH and filled by all responsible partners of the LaWEEEda consortium, were therefore compiled and evaluated by TUHH in the first quality report D6.2 to display the progress of the project until M18 and to identify possible time delays and gaps within the project work. The second quality report regarding the progress of the project until M24, meaning until the 14<sup>th</sup> of October 2018, was delivered within deliverable D6.3. The ongoing progress was shown within D6.4 evaluating the quality of the project's progress until M30, the 14<sup>th</sup> of April 2019. Within the quality report D6.5 the progress until M36 (14<sup>th</sup> of October 2019) is displayed and further discussed.

As the filled excel file of the quality indicators is very big in frame size, it is not shown within this report but attached as ANNEX\_D6.5a\_quality indicators\_M36 and discussed (see Quality indicators: status M3). The related Gantt-Chart is attached as well as ANNEX\_D6.5b\_LaWEEEdA - Gantt-Chart\_M36 but also visualized and discussed within this report (see Gantt-Chart: status M3).

*Table 1 - due dates of the quality reports*

<b>Deliverable</b>	<b>Due date</b>
D6.2	M18
D6.3	M24
D6.4	M30
D6.5	M36

The framework of D6.5 is identically with D6.2 respectively D6.3 or D6.4 and follows all aspects of the quality guideline D6.1 which was agreed upon within the LaWEEEda consortium at the beginning of the project. As documented in the minutes of the project meeting in Vienna in December 2017, the consortium further agreed on crossing out the obligation to provide internal technical implementation reports. This is reasonable as all partners are committed to the project, follow its guidelines and communicate if

challenges occur. Consequently, it was decided that this additional monitoring instrument is not needed anymore since M18.

On the 23<sup>rd</sup> of July 2019 the eligibility period of the project was officially extended by six months until the 14<sup>th</sup> of April 2020 - M42 (see ANNEX\_LaWEEEda\_EACEA commitment\_project extension). The related dates of the Gantt Chart were adapted within this quality report D6.5 and will thereby differ slightly from former reports.

## Quality indicators: status M36

As described in the LaWEEEda quality guideline (see D6.1) the implemented 36 quality indicators are separated in five categories. The categories are

- Project management and related processes,
- Collaborations between universities and industry,
- Content of the developed trainings,
- Social aspects and
- Dissemination and outreach.

The allocated partner organizations have filled in their impression indicating the current state of the related content of the quality indicator. As the table sizes of the answered indicators regarding their status in M36 do not fit appropriately in this document, the tables are not visualized in the following sections. Therefore, the filled excel file ANNEX\_D6.5a\_quality indicators\_M36 is attached to this document.

Due to the indicators, each responsible organization shall be reminded to its tasks and milestones. As all partner organizations filled in their allocated indicators, the function as a reminder has been accomplished.

As it was agreed on crossing out the internal technical implementation reports (see related minutes of the Project meeting in Hamburg from July 2018), the indicators 1.2, 3.1 and 4.3 are not involved within the evaluation anymore as they were directly linked.

### Project management and related processes

All quality indicators within the category project management and related processes are in line with the project outcomes and quality guideline.

### Collaborations between universities and industry

All partner institutions of the LaWEEEda consortium have documented their new collaborations. All partner universities are aware of the need to implement the courses in their curricula and establish collaborations with the industry - some already did that successfully. Both Brazilian universities have already updated existing Master programmes whereby the Nicaraguan universities ULSA and UCAN strive for doing

this until the upcoming semester. The topic is already set and well appreciated in the individual administration indicating that the official update is just a matter of time. Indicator 2.7 “Increased communication and collaboration between Universities and Businesses in the area of e-waste” in form of feedback reports still needs to be answered with “no”. It turns out to be a tough to achieve indicator within the project lifetime as they are supposed to be reliable and therefore need some time after the training to actually adapt the new/increased practical skills.

### Content of the developed trainings

As the materials are not completely implemented in the Nicaraguan universities until now, the evaluation still cannot be done. Anyhow, feedback forms are in preparation and will be established when the courses are given. Brazilian partners already provided them during the workshops they presented to interested parties. All partner universities already trained practitioners as well as trainees. In particular, the UFRJ trained already 137 persons in total within several workshops. Special emphasis should be put on the industrial partners as besides COOPAMA neither the Brazilian nor the Nicaraguan partners did train their practitioners with LaWEEEda content, whereby a slight overlap does exist, as some of the practitioners who were trained at each universitie came from the local industrial partners. Therefore, they are included in the numbers of universities only.

### Social aspects

All quality indicators within the category social aspects are in line with the project outcomes and quality guideline.

### Dissemination and outreach

Joint presentations have already been done in the name of LaWEEEda, whereby written publications have not been submitted. As LaWEEEda aims at spreading their synergies and combined knowledge to increase the number of new collaborations, it is recommended to do joint publications as well in the near future.

Until M36 LaWEEEda has 527 followers on Facebook which shows an increase of 89 since the last quality report. On Twitter are still 22 followers only. As already pointed out in within D6.4., Twitter is not the ideal channel to disseminate LaWEEEda related

content, as the number of followers still does not rise after major efforts were done. Therefore, it was decided to focus even more on other social media channels like Facebook. Brazilian universities have already graduated of the new implemented courses. Those were mainly based on single workshops and not on complete courses during the semester, but anyhow this is very valuable and indicates the acceptance of the materials. The other indicators are in line with the project outcomes and the quality guideline.

## Gantt-Chart: status M36

The Gantt-Chart is a relevant tool to keep the overview about project activities. The basic structure of the Gantt-Chart used in LaWEEEda is already shown in the quality guideline of the project (see D6.1). In the following sections the progress of each task activity is shown in percentages estimated by each task leader. The complete excel file is attached in the annex (see ANNEX\_D6.5b\_LaWEEEdA - Gantt-Chart\_M36).

### WP1 related tasks

All tasks in WP1 are completed according to TUHH and ULSA as task responsible institutions. That means that the information basis is created and WP1 is completed including the delivery of all deliverables.

*Table 2 – M36 - Gantt Chart of LaWEEEda - WP1*

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
1	Creating the information basis	TUHH	15.10.2016	212	14.05.2017	100%	212	14.05.2017	completed
1.1	Compilation of a holistic inventory of existing teaching/training capacities and related gaps and needs	TUHH, all partners	15.10.2016	151	14.03.2017	100%	151	14.03.2017	completed
1.2	Compilation of established University-Enterprises collaboration approaches and best practice examples (at the participating organization and in the area of e-waste management)	TUHH, partners	15.10.2016	151	14.03.2017	100%	151	14.03.2017	completed
1.3	Preparatory activities regarding specific national and regional, social, gender and ethical aspects respecting national and regional specialities	ULSA, all partners from partner countries	15.10.2016	151	14.03.2017	100%	151	14.03.2017	completed
1.4	Selection of modules, courses and educational products for academic education and CPD	TUHH, all partners	15.02.2017	89	14.05.2017	100%	89	14.05.2017	completed
1.5	Organisation of preparatory workshops	ULSA	15.12.2016	151	14.05.2017	100%	151	14.05.2017	completed



## WP2 related tasks

Considering the project extension until the 14<sup>th</sup> of April 2020 (see ANNEX\_LaWEEEda\_EACEA commitment\_project extension), all task of WP2 are in line with the project proposal and are thereby most likely finalized by the the end of the project. Reflecting on the calcdatetime the progress of WP2 is already two months ahead.

Table 3 – M36 – Gantt-Chart of LaWEEEda - WP2

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
2	University-Enterprise Collaboration and Trainings centre	UFRJ	15.05.2017	1066	14.04.2020	89%	946	16.12.2019	in progress
2.1	Planning and development of the LaWEEEda University-Enterprise Business and Trainings centres and Network	UFRJ, all other partners	15.05.2017	822	14.08.2019	100%	822	14.08.2019	completed
2.2	Develop roadmaps	UFRJ, all other partners	15.11.2017	882	14.04.2020	85%	750	04.12.2019	in progress
2.3	Implementation of a web platform to support the centre	BOKU, UFRJ	15.11.2017	882	14.04.2020	90%	794	17.01.2020	in progress
2.4	Businessplan development	UFRJ, all other partners	15.04.2018	731	14.04.2020	80%	585	20.11.2019	in progress

### WP3 related tasks

Task 3.1 is finalized, tasks 3.4 and 3.6 are already ahead of the expected timeframe so that they are in line with the project proposal. Related to task 3.2 the adaption of educational products still needs to be adapted for the academic education. The related materials are provided and are tested already in workshops at the UFRJ. Concrete plans scheduling the adaption of the courses in the academic education are developed so that the task is already tackled. Missing step is the actual adaptation into the upcoming curricula. But as this is already in advanced planning, it is just a matter of time until it is done. The piloting and improvement of the products (Task 3.5) will be done after the materials are adapted resulting in an obvious delay. The development of NEW higher education products related to the provided materials in each university will be done likewise.

Table 4 – M36 – Gantt-Chart of LaWEEEda - WP3

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
3	Academic Education	ULSA	15.05.2017	822	14.08.2019	80%	658	03.03.2019	in progress
3.1	Detailed definition of academic educational products to be adapted and developed	BOKU, all academic partners, input from non-academic partners	15.05.2017	153	14.10.2017	100%	153	14.10.2017	completed
3.2	Adaptation of educational products for Academic Education	ULSA, all academic partners, input from non-academic partners	15.11.2017	212	14.06.2018	60%	127	21.03.2018	in progress
3.3	Development of NEW higher education products	ULSA, all academic partners, input from non-academic partners	15.11.2017	212	14.06.2018	80%	170	03.05.2018	in progress
3.4	Train-the-teacher on new and adapted higher education products	ULSA, all academic partners	15.06.2018	670	14.04.2020	80%	536	02.12.2019	in progress
3.5	Piloting and improvement of the developed academic products	ULSA, all academic partners	15.08.2018	609	14.04.2020	80%	487	14.12.2019	in progress
3.6	Preparation of approval of new and adapted educational products into existing curricula	ULSA, all academic partners	15.12.2018	487	14.04.2020	80%	390	08.01.2020	in progress

## WP4 related tasks

WP4 is completed.

Table 5 – M36 – Gantt-Chart of LaWEEEda - WP4

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
4	Continuing professional development (CPD)	BOKU	15.05.2017	1066	14.04.2020	100%	1066	14.04.2020	completed
4.1	Detailed definition of CPD educational products to be adapted and developed	BOKU, all other partners	15.05.2017	153	14.10.2017	100%	153	14.10.2017	completed
4.2	Adaptation of existing educational products for CPD	BOKU, all other partners	15.05.2017	396	14.06.2018	100%	396	14.06.2018	completed
4.3	Development of NEW CPD educational products	BOKU, all other partners	15.05.2017	396	14.06.2018	100%	396	14.06.2018	completed
4.4	Train-the-trainer on new and adapted CPD educational products	BOKU, all other partners	15.06.2018	426	14.08.2019	100%	426	14.08.2019	completed
4.5	Piloting and improvement of the developed CPD products	BOKU, all other partners	15.08.2018	365	14.08.2019	100%	365	14.08.2019	completed
4.6	Certification of new and adapted educational CPD products	UFRJ, all other partners	15.12.2018	243	14.08.2019	100%	243	14.08.2019	completed

## WP5 related tasks

In addition to the development of training materials related teaching tools and techniques have to be developed. The basis regarding the methods has already been set but have to be implemented while developing the related materials. Major delays still occur regarding the implementation of e-learning and the development of a digital library resulting in an overall timedelay regarding T5.1 - Selection, development and adaptation of state of the art of modern teaching tools and methods. The digital library is developed in terms of a digital repository but not launched yet based on bureaucratically and technical issues related to sustainable hosting of the servers. This is known issue and is already addressed by TUON. As soon as the library is launched, percentages indicating the tasks progress will raise rapidly and reduce the current time delay. Anyway, as the calcdates regarding the overall WP5 shows almost a 10 months' delay, TUON will be reminded once again to ensure fulfilling all latest until April 2020.

Table 6 – M36 – Gantt-Chart of LaWEEEda - WP5

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
5	Teaching tools and techniques	TUON	15.05.2017	883	14.10.2019	67%	595	30.12.2018	in progress
5.1	Selection, development and adaptation of state of the art of modern teaching tools and methods	TUON, all University partners	15.05.2017	1066	14.04.2020	62%	661	06.03.2019	in progress
5.1.1	Implementation of e-learning	TUON, all other partners	15.05.2017	335	14.04.2018	50%	168	29.10.2017	in progress
5.1.2	Development of a "Digital library"	TUON	15.05.2017	883	14.10.2019	60%	530	26.10.2018	in progress
5.1.3	Trainings related to entrepreneurial skills	BOKU, all other partners	15.08.2017	426	14.10.2018	100%	426	14.10.2018	completed
5.1.4	Implementation of shared trainings work stations	UFRJ, all other partners	15.08.2017	426	14.10.2018	100%	426	14.10.2018	completed
5.2	Piloting and improvement of new tools	TUON, all partners	15.11.2018	120	14.03.2019	70%	84	06.02.2019	in progress
5.3	Prepare Integration of new tools into the University structures as well as at Companies site and in the collaboration centre	UNESP, all other Partners from Brazil and Nicaragua	15.11.2017	577	14.06.2019	70%	404	23.12.2018	in progress

## WP6 related tasks

The quality guideline D6.1 has been submitted and the implementation of the continuous quality monitoring took officially place during the meeting in Vienna in December 2017. Following steps will be done to coordinate and document best practises and lessons learned from trainings development and integration through the rest of the project lifetime. As already shown in Table 1 regular quality reports had to be delivered. The coordination of documentation of best practice and lessons learned from trainings development and integration are steadily monitored. All deliverables D6.1 to D6.5 were delivered, so that WP6 is completed.

*Table 7 – M36 – Gantt-Chart of LaWEEEda - WP6*

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
6	Project Monitoring and Quality Assurance	TUHH	15.10.2016	1095	14.10.2019	100%	1095	14.10.2019	completed
6.1	Development of a Quality Plan/Guidelines and exchange of best practice	TUHH, all partners	15.10.2016	182	14.04.2017	100%	182	14.04.2017	completed
6.2	Implementation of continuous Quality monitoring	TUHH, all WP Leaders with support of WP contributors	15.01.2017	1003	14.10.2019	100%	1003	14.10.2019	completed
6.3	Coordination of documentation of best practise and lessons learned from trainings development and integration	TUHH, all WP Leaders	15.04.2017	913	14.10.2019	100%	913	14.10.2019	completed

## WP7 related tasks

The progress of all tasks is in line with the project proposal. Task 7.3 is not hindering the successful result of the overall project and will be finalized with the end of the project in M42.

Table 8 – M36 – Gantt-Chart of LaWEEEda - WP7

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
7	Project Dissemination and Exploitation	UNESP	15.10.2016	1278	14.04.2020	98%	1246	13.03.2020	in progress
7.1	Development of a detailed Dissemination strategy	UNESP, all other partners	15.10.2016	92	14.01.2017	100%	92	14.01.2017	completed
7.2	Development of website and dissemination material	UNESP, all partners	15.10.2016	1095	14.10.2019	100%	1095	14.10.2019	completed
7.3	Ongoing engagement of all stakeholder groups and support of consortium partners	UNESP, all other partners	15.10.2016	1278	14.04.2020	90%	1150	08.12.2019	in progress
7.4	IPR management and Exploitation	BOKU, all other partners	15.10.2016	1095	14.10.2019	100%	1095	14.10.2019	completed

## WP8 related tasks

Considering the project extension of six months, all tasks in WP8 are in line with the project outcomes according to BOKU as task's responsible institution. All not completed tasks are based on the fact, that the project is still running and will be finalized with the project close down. This is why no major risks have to be expected in the near future regarding further project processes.

Table 9 – M36 – Gantt-Chart of LaWEEEda - WP8

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
8	Project Management	BOKU	15.10.2016	1278	14.04.2020	85%	1086	05.10.2019	in progress
8.1	Management of the Project start	BOKU, all other partners and associated partners for the Kick-Off meeting	15.10.2016	92	14.01.2017	100%	92	14.01.2017	completed
8.2	Ongoing Project Coordination	BOKU, all other partners and associated partners for the interim Consortium meeting	15.02.2017	1155	14.04.2020	80%	924	27.08.2019	in progress
8.3	Financial and content controlling	BOKU, WP leaders	15.02.2017	1155	14.04.2020	80%	924	27.08.2019	in progress
8.4	Management of the Project close down	BOKU, all other partners and associated partners for the final Consortium meeting	15.08.2019	244	14.04.2020	80%	195	25.02.2020	in progress



## Conclusion

By considering the overall progress of all WPs of the LaWEEEda project it can be stated that the project is in line with the project proposal, on a very good way to end up successful and reach its planned outcomes. Respecting the CalcDate the project has an overall time delay of four months so far based on the estimations of every task responsible institution. As the project time was extended for six months to cover all the formalities and most of the not completed tasks can be fulfilled as soon as one of its subtasks is finalized, LaWEEEda will most likely be closed with all tasks completed in April 2020.

*Table 10 – M36 – Gantt-Chart of LaWEEEda - total progress*

Latin American-European network on waste electrical and electronic equipment research, development and analyses" (LaWEEEda)									
Project Coordination: BOKU					Version: 1.0				
Project start 15.10.2016					Status: Final phase				
Today 14.10.2019									
WP	Task	Responsibility	Start	Duration [days]	End of WP	progress	CalcDone	CalcDate	Status
0	Projekt Coordination	BOKU	15.10.2016	1278	14.04.2020	90%	1148	06.12.2019	in progress



## **ANNEX**

ANNEX\_D6.5a\_quality indicators\_M36

ANNEX\_D6.5b\_LaWEEEdA - Gantt-Chart\_M36

ANNEX\_LaWEEEda\_EACEA commitment\_project extension