




CIRC VET

CIRCULAR ECONOMY PRACTICAL TRAINING MATERIALS
FOR PLASTIC MANUFACTURING INDUSTRIES

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D6.1 - Pilot Analysis and Recommendations (Companies)



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CIRC VET – Circular Economy Practical Training
Materials for Plastics Manufacturing Industries

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| Version | Date | Author | Description |
| V0.1 | 08/07/2024 | Dovilė Mackevičienė (LINPRA) | Draft |
| V0.2 | tbc | Dovilė Mackevičienė (LINPRA) | Final version will be provided when POLYMERIS will pilote their companies (end of August) |
| V0.3 | 24/09/2024 | Dovilė Mackevičienė (LINPRA) | Final Version integrating all contributions |
| Reviewed | YES - NO | | |
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TABLE OF CONTENTS

| | |
|--|----|
| D6.1 - Pilot Analysis and Recommendations (Companies) | 1 |
| 1. Introduction | 4 |
| 2. Overview | |
| 3, Recommendations for future actions | 9 |
| 3. Glossary of terms, abbreviations and acronyms | 10 |

1. Introduction

This report summarizes the piloting feedback for various modules from all partners involved. Each module's performance, feedback, and areas for improvement are outlined based on the data collected from trainers, coordinators, and trainees.

2. Overview

Module 1: General Circular Economy Understanding – Systemic Strategies

Module 2: Eco-Design and LCA

Partner Piloting: LINPRA

Number of Piloted Companies: 3

Target: 3

Data Relating to Piloting:

- **Location:** LINPRA
- **Companies Involved:**
 - MB Ateities Ekosistemas
 - Doloop (UAB Putoksnis)
 - Flexblow UAB
- **Date and Duration:** 10/06/2024, 4 weeks, 3 employees

Piloting Process:

The piloting process was conducted with three plastic manufacturing companies. Each company received the piloting guidelines developed by LINPRA. Representatives from these companies accessed the platform using the provided guidelines, individually completed Modules 1 and 2, and then took the associated tests and provided feedback. However, one company representative encountered a persistent issue with the Quiz functionality. The test required selecting multiple options, but the platform did not permit this action. Despite multiple assistance attempts from the coordinating partner, the issue remained unresolved. This problem must be addressed for future implementations, as companies are hesitant to engage with platforms that do not function correctly.

Feedback:

Feedback was collected using a standardized feedback form. The forms included responses regarding the training's effectiveness, applicability, and areas for improvement.

Conclusion:

The training for Modules 1 and 2 was well received, with positive feedback on its usefulness, applicability, and overall value. The major issue highlighted was the functionality of the Quiz options, which must be resolved for future implementations. Companies representatives declared the need of Sustainability reports and CO2 emissions calculation need in their organisations. In general, the level of usefulness was evaluated as very good but with an average level of applicability of the knowledge/practices acquired in the daily work of employees. Companies would recommend this modules / training to other organisations.

Additional Training Needs: CO2 emissions calculation, sustainability reports.

Recommendation: if it is possible to read the information in different languages (not only English), but it is also suggested to make the Quiz in those languages.

Module 3: Digital Skills

Partner Piloting: AIJU

Number of Piloted Companies: 7

Target: 5

Data Relating to Piloting:

- **Location:** AIJU, Ibi Alicante, Spain
- **Trainer:** Alejandro Mira (AIJU)
- **Center Coordinators:** Alejandro Mira, Guillermo Abad
- **Trainee Companies:**
 - NOVINTEC
 - SEYCA PLASTIC
 - INDEN PHARMA
 - TOTEMPLAST
 - INYECTADOS IBI
 - PLASTICOS VALDÉS
 - CARLOS VALERO
- **Date and Duration:** 10/06/2024, full-time, 7 trainees

Feedback:

The course included theoretical content and internships. Feedback was collected from AIJU trainers and coordinators through questionnaires completed by trainees. Key issues highlighted include:

- **Time Constraints:** Limited time affected the comprehensiveness of the material.
- **Online Platform:** Trainees faced difficulties with the e-learning platform regarding access, navigation, and enrollment.
- **Content:** Suggestions to reduce theoretical content and focus on basic concepts.

Conclusion:

Increased time allocation, improved platform usability, and a focus on fundamental concepts are necessary.

Module 4: Recycling, Downcycling, and Upcycling

Partner Piloting: AIJU

Number of Piloted Companies: 7

Target: 5

Data Relating to Piloting:

- **Location:** AIJU, Ibi Alicante, Spain
- **Trainer:** Ana Ibáñez (AIJU)
- **Center Coordinators:** Ana Ibáñez, Guillermo Abad
- **Trainee Companies:**
 - NOVINTEC
 - SEYCA PLASTIC
 - INDEN PHARMA
 - TOTEMPLAST
 - INYECTADOS IBI
 - PLASTICOS VALDÉS
 - CARLOS VALERO

- **Date and Duration:** 07/06/2024, full-time, 7 trainees

Feedback:

Similar to Module 3, the course consisted of theoretical content and internships. Feedback was received from AIJU trainers and coordinators:

- **Time Constraints:** Limited time for comprehensive teaching.
- **Online Platform:** Usability issues for trainees.
- **Content:** Need to balance theoretical and practical content.

Conclusion:

To enhance the module, more teaching time and a user-friendly online platform are essential. Reduce theoretical content and focus on basic concepts

Module 5: Manufacturing Processes

Partner Piloting: PROPLAST

Number of Piloted Companies: 5

Target: 5

Data Relating to Piloting:

- **Trainer:** Alberto Frache (Politecnico di Torino)
- **Date and Duration:** 09/04/2024, full-time
- Companies Involved:
 - Circularity
 - Caffitaly System S.p.A
 - Versalis
 - Vegea S.r. l
 - Guala Pack

Feedback:

Trainers and coordinators provided detailed feedback on the module's content and structure:

- **Content Balance:** Some processes like extrusion and injection molding were not covered in sufficient detail, while others received excessive attention.
- **Terminology Issues:** Incorrect terms were used, leading to confusion.
- **Module Segmentation:** Suggestion to redistribute content for better balance and clarity.

Conclusion:

Revise the module to provide a balanced coverage of key manufacturing processes and correct terminology.

Module 6: Users and Usage

Partner Piloting: CENTIMFE

Number of Piloted Companies: 5

Target: 5

Data Relating to Piloting:

- **Entities Involved:**
 - Moldit Indústria de Moldes S.A.
 - MICE – Molds and Injected Components Engineering SA
 - WeADD

- EROFIO ENGENHARIA
- TJ Moldes
- **Date and Duration:** 03/06/2024

Feedback:

Collected through questionnaires focusing on the training's effectiveness and impact:

- **Usefulness and Applicability:** High level of applicability and usefulness in daily work and organizational needs.
- **Platform Feedback:** Positive overall, but suggestions for improvement included more dynamic content and better translations.
- **Topics for improvement:**
 - Mixed language on some slides;
 - Some translation errors;
 - Extensive course with lots of text. Can use more videos/images
- **Conclusion:**
Training was well-received but can be improved with enhanced visual content and accurate translations.

Module 7: Recovery Partner Piloting: Proplast

Number of Piloted Companies: 5

Target: 5

Data Relating to Piloting:

- Location: Proplast
- **Date:** 06/05/2024
- Trainer: Edoardo Zonta – University of Trento
- Companies Involved:
 - Circularity
 - Caffitaly System S.p.A
 - Versalis
 - Vegea S.r.l
 - Guala Pack

Feedback

The piloting of Module 7 focused on the recovery aspects within the circular economy framework. The following points were highlighted in the feedback from trainers and coordinators:

Overall Training Action Evaluation

The Module 7 piloting revealed several areas that need improvement:

- **Content Repetition:** The module contains several repetitions of content found in Module 2 "Eco-design and LCA," particularly in the section dedicated to eco-design (7.3), without adding additional information.
- **Business Opportunities Section:** The section dedicated to new business opportunities (7.2) is limited to a brief market data review, which is not always up-to-date. This section on business models should be expanded.
- **Concept of Recovery:** The concept of recovery is not clearly defined. While practical examples illustrate the 4Rs effectively, a theoretical introduction to these examples is missing.

- **Quality of Presentations:** The PowerPoint presentations are of poor quality and need improvement.

Comments / Criticisms / Suggestions for Future Actions

To enhance the module's effectiveness, the following improvements are recommended:

- **Expand Content:** Improve the content by expanding and specifying details.
- **Improve Presentations:** Enhance the PowerPoint presentations to make them more useful for the sessions.

3. Recommendations for future actions

1. **Allocate More Teaching Time:** Ensure sufficient time is dedicated to each module for comprehensive coverage.
2. **Enhance Online Platform Usability:** Improve the accessibility, navigation, and enrollment processes.
3. **Content Adjustment:** Balance theoretical and practical content, focusing on fundamental concepts.
4. **Review and Correct Terminology:** Ensure accurate and industry-relevant terms are used.
5. **Visual and Dynamic Content:** Incorporate more videos, graphics, and interactive elements to enhance engagement.

This feedback report provides a detailed overview of the performance and areas for improvement for each module, guiding future training initiatives to be more effective and efficient.

Module 8: Entrepreneurship

Partner Piloting: POLYMERIS

Number of Piloted Companies: 3

Target: 5

Data Relating to Piloting:

Trainee Companies:

- Parc Avenir
- Lab Stories
- Nouvelles Plasturgie

Date and Duration: July 2024

Feedback:

Parc Avenir: Overall evaluation: 3 out of 5.

- Issues with translation in the provided materials.
- Difficulty following PowerPoint presentations while referencing the document.
- Lack of industry-specific examples, particularly from the plastics sector.
- **Suggestion:** Include a consistent example throughout the training, comparing it with other innovative examples from the plastics industry.

Lab Stories: Overall evaluation: 3 out of 5.

Novelles Plasturgie: Overall evaluation: 2 out of 5.

- Concerns with inconsistent translation between verbs and adjectives, making some parts illogical.
- PowerPoint slides varied in quality; the third set was considered clearer and better organized compared to the first two.
- Feedback highlighted several specific issues with the content, including unclear titles, missing capital letters, and logical flow problems.
- **Suggestion:** Improve translation consistency, include more examples and explanations, and ensure logical connections between slides.

Conclusion:

- There is a need for clearer translation, better alignment of content with the plastics industry, and more structured and logically connected presentations.

4. Glossary of terms, abbreviations, and acronyms

| Partner shortname | |
|-------------------|---|
| P1-AIJU | Partner 1 – ASOCIACIÓN DE INVESTIGACIÓN DE LA INDUSTRIA DEL JUGUETE CONEXAS Y AFINES (Spain) |
| P2-CENTIMFE | Partner 2 – CENTRO TECNOLOGICO DA INDUSTRIA DE LOS MOLDES E FERRAMENTAS ESPECIALEIS – CENTIMFE (Portugal) |
| P3-KIMW-Q | Partner 3 – Gemeinnützige KIMW-Quaðifizierungs GmbH (Germany) |
| P4-POLYMERIS | Partner 4 – POLYMERIS (France) |
| P5-PROPLAST | Partner 5 – Consorzio per la promozione della cultura plastica – PROPLAST (Italy) |
| P6-LINPRA | Partner 6 – LIETUVOS INZINERINES PRAMONES ASOCIACIJA LINPRA (Lithuania) |
| P7-ULPGC | Partner 7 – Universidad de las Palmas de Gran Canaria (Spain) |
| P8-IDL | Partner 8 – Infinitivity Design Lab (France) |
| P9-APRC | Partner 9 – ALYTAUS PROFESINIO RENGIMO CENTRAS (Lithuania) |
| P10-UNITR | Partner 10 – Università degli Studi di Trento (Italy) |

| | |
|---------|---|
| P11-HIT | Partner 11 – HUB INNOVAZIONE TRENINO – Fondazione (Italy) |
| P12-VPM | Partner 12 – VISAGINO TECHNOLOGIJOS IR VERSLO PROFESINIO MOKYMO CENTRAS (Lithuania) |

PROJECT INFO

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PROJECT CONSORTIUM



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